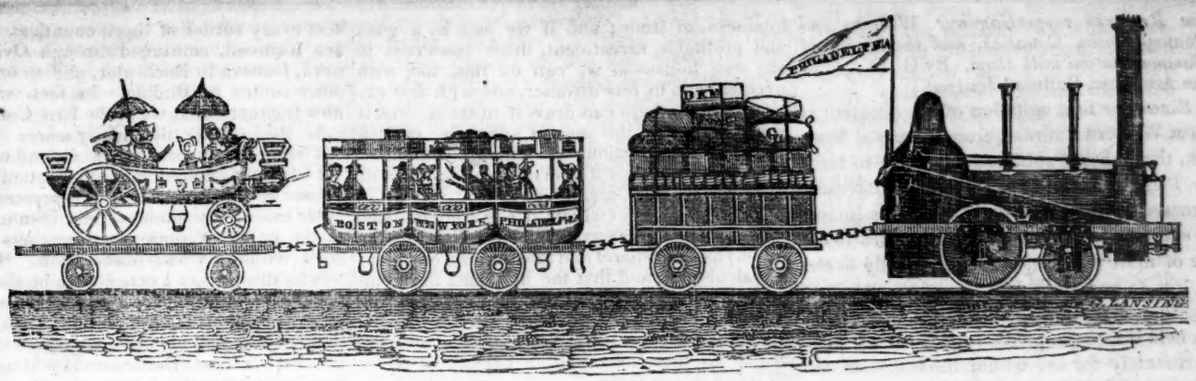



# AMERICAN RAILROAD JOURNAL,
## AND ADVOCATE OF INTERNAL IMPROVEMENTS.

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CONTENTS :


Extracts from the Law authorizing the South Carolina Railroad; Erie Canal; Homer and Steam, &c. . . page 321
Remarks on our Western and Pennsylvanian Counties, and the Means of Communication with them; Report of the Commissioner of the South Carolina Canal and Railroad Company . . . . . 322
Boston and Providence Railroad; Amount of Power lost by Curves on Railways, &c. . . . . 325
Merchants' Exchange, New-York (with an engraving); Twinkling of the Fixed Stars; On producing Engravings of Medals by Machinery (with engravings). . . . 326
Architecture. . . . . 327
Proposals for constructing a Steam Camel; On the Methods of describing various Curves for Arches (with engravings); Stucco for Walls, &c. . . . . 328
Literary Notices. . . . . 330
Foreign Intelligence . . . . . 332
Summary. . . . . 333
Miscellany. . . . . 334
Poetry . . . . . 335
Meteorological Record; Advertisements . . . . . 336


## AMERICAN RAILROAD JOURNAL, &c.

NEW-YORK, MAY 25, 1833.

GREAT WESTERN RAILROAD.—We would ask the attention of those of our readers who are at all interested in the prosperity of the *city* and *state* of New-York, to the communication of "G. Jr." in this number of the Journal, upon the subject of the *Great Western Railway*. It is a work of great importance to New-York, —one in which every *New-Yorker* should feel deeply interested, and we therefore cheerfully join with our correspondent in saying, "GO ON."

SOUTH CAROLINA RAILROAD REPORT.—The last Annual Report of ALEXANDER BLACK, Esq. which will be found in this number of the Journal, gives us the desired information relative to the South Carolina Railroad. We have of late heard many inquiries relative to the condition and prospects of this road, and are therefore gratified to be able to give an answer so favorable as that which may be gathered from this Report. In order to give a fair view of the advantages and privileges of this company, we also give the 1st and 11th sections of the act of incorporation, from which it will be at once seen that their privileges are very extensive, and secured for a long period.

When we reflect for a moment upon the extent of its privileges, the enterprise of those engaged in its construction, and the wide extent of country for which it is destined to become the medium of intercourse with the Atlantic, we cannot but believe that the stock will become exceedingly valuable.

Section 1. Be it enacted by the Honorable the Senate and House of Representatives, now met and sitting in General Assembly, and by the authority of the same, That the Company provided for in the aforesaid act, and hereinafter more especially incorporated and authorized, shall, and may direct and confine their first efforts and enterprise to the formation and completion of the rail communication between Charleston and the Savannah river, at or near Hamburg, and other points or places on the said river, by branch or branches of the said railroad, in the manner hereinafter mentioned; and when such communication shall be completed, or before, if the said company shall find it practicable and advantageous, they shall have power and authority to lay off and construct branches thereof, to Columbia and Camden, or to the most convenient points at or near these towns, or otherwise to construct railroad or railroads between these two towns and Charleston; and the right to make, keep up, and employ such railroads, shall be vested in the company herein and hereby incorporated exclusively; and for the term of time hereinafter mentioned, no other communication between Charleston and Savannah river, at or near Hamburg, or the waters of the Savannah river, or the towns of Columbia and Camden, or to any point on the rivers at or near the same, by other railroads, or newly constructed canals, shall be constructed by or under the authority of this state.

Sec. 11. And be it further enacted by the authority aforesaid, That the said South Carolina Canal and Railroad Company shall, at all times, have the exclusive right of transportation or conveyance of persons, merchandise, and produce, over the railroad and railroads, and canals, to be by them constructed, while they see fit to exercise the exclusive right: *Provided*, That the charge of transportation or conveyance shall not exceed thirty-five cents per hundred pounds on heavy articles, and ten cents per cubic foot on articles of measurement, for every one hundred miles, and five cents per mile for every passenger: *Provided always*, That the said Company may, when they see fit, rent or farm out all or any part of their said exclusive right of transportation or conveyance of persons, on the railroad or railroads, with their privileges, to any individual or individuals, or other company, and for such term as may be agreed upon, subject to the rates above mentioned; and the said Company, in the exercise of their right of carriage or transportation of persons or property, or the persons so taking from the Company the right of transportation or conveyance, shall, so far as they act in the same, be regarded as common carriers. And it shall be lawful for the said Company to use or employ any sections of their intended railroad, subject to the rates before mentioned, before the whole shall be completed, and in any part thereof, which may afford public accommodation for the conveyance of persons, merchandise, or produce; and also to lay off and construct, and put in operation and use, any branch or branches of the said railroad, so as to communicate with the waters of the Savannah river, or navigable waters of the Edisto or its branches, subject to the aforesaid rates of transportation. And the said Company shall have power to take, at the store-houses they may establish on or annexed to their railroad, all goods, wares, merchandises and produce intended for transportation or conveyance, prescribe the rules of priority, and charge such just and reasonable terms and compensation for storage and labor, as they may by rules establish, (which they shall cause to be published,) or may be fixed by agreement with the owners; which compensation shall and may be distinct from the aforesaid rates of transportation.

THE ERIE CANAL.—We are gratified (says the Albany Argus of Wednesday) to learn that the breaches in the canals have been all repaired, and that the entire line of the Erie canal is now navigable. The packets arrive at and depart regularly from Schenectady. Much credit is due to the superintendants of repairs, for their activity in preventing and promptitude in repairing injuries by the late rain. Under their supervision, the amount of damage to the canals, compared with what might have been anticipated, is very trivial.

There are 1681 Canal Boats that ply on the Erie canal. 300 of these are said to belong to Cayuga Lake alone.—[Alb. Adv.]

HOMER AND STEAM.—At the ninth anniversary of the London Mechanics' Institution, Dr. Birkbeck, in awarding a prize of £20 for the best essay on steam, observed, that the author had discovered several notices of the power of steam by the ancients, which had escaped preceding writers. He had also detected, in the eighth book of the *Odyssey*, a probable allusion to steam navigation:

"So shalt thou instant reach the realms assigned,
In wondrous ships, self-moved, instinct with mind:
No helm secures their course, no pilot guides;
Like man intelligent they plough the tides;
Conscious of every coast and every bay,
That lies beneath the sun's all-seeing ray.
Though clouds and darkness veil the encumbered sky,
Fearless through darkness and through clouds they fly;
High tempests rage, high rolls the swelling main,—
The sea may roll, the tempests rage in vain."

*Some Remarks respecting our Western and Pennsylvanian Counties, and the Means of Communication with them.* By G. Jr. [For the American Railroad Journal.]

Since the first agitation of the question of a great Western Railroad, from the city of New-York, through our southern counties, to Lake Erie, there has been at times much excitement expressed by the community upon this important subject. A subject we will venture to declare of more *vital* importance, not only to our city, but to our state, has not, since the first projection of that living artery, the Erie Canal, been held before the public consideration. But, unfortunately for us, within the last year, the public mind has been so much distracted by general, political, and, at times, opposing interests, that the subject for the present *appears* to be at a pause.

At the Kaatskill, upon the Hudson river, a ridge of mountainous district commences, and extends in greater or less elevation, with a broad sweep through Madison county, and then southerly again, across the whole state. The only break worthy of importance along its whole extent is the gorge of the Beaver Creek and Cattatunc, showing, from Ithaca, at the head of Cayuga Lake, in Tompkins county, to Owego, on the head waters of the Susquehannah river, the present route of the Ithaca and Owego Railroad: so that you will at once observe, that from the westerly portions of Green, Ulster, and Sullivan, and so through all the southern and more western tier of counties, we are, in a commercial point of view, entirely deprived of any communication, either by canal, good road, or navigable water, with the grand focus of the wealth of the State—our city.

These counties, especially the more western, are in richness, depth, and fertility of soil, not surpassed by any, either in the country or state; and some of them possess immense resources in quarries of an excellent quality of white and grey granite, limestone, and gypsum.

Every moment that we procrastinate is an age of interest against us. Baltimore, that city whose enterprise and *public spirit* is so justly celebrated, is now, this very moment, drawing increased resources from out the very bosom of some of our western and richest counties in the state!

The Susquehannah, whose head waters branching out in navigable and many courses, look upon and embrace our frontier, is every season whirling down its rapid tide the rich produce of not only Alleghany, Tioga, Steuben, Broome, and Delaware, but since the canal from Seneca Lake to Newtown, is extending its trade in Ontario, Yates, Seneca, and Tompkins; the three latter counties, especially, considered the garden of our State. And now that the Ithaca and Owego railroad will have overcome the former heavy and expensive carrying pass, it will, like a funnel, draw wealth and business down the Susquehannah, even the very produce of Erie and Genesee!

This is not imagination: I call upon every person conversant in our western trade to agree with me; it is not that we have looked upon this fair and productive soil, and that the pitiful jealousy of seeing its rich produce borne onward to Baltimore, Philadelphia, or any other place, has caused me to regret that its richness has gone that way, nor is it either that the trade will continue to go to any of these places; but it is that I would rather *that it should come here.*

Competition, we are told, is the very soul of business, of trade; and if we can, by a good and profitable investment, draw resources to our own house—if we can do this, too, with *greater ease*, in *less distance*, and with *less expense*, than others can draw it to them, (and if you will look at the map of our state, or visit the remarked sections of country, you will, I am convinced, say with me that we *can*,)—let us up while we may, and about it.

Taking Owego, (which, if our contemplated road go into operation, will be the Utica of the route,) as the general and most proper *one* point of calculation, and that too at which the computed distance, reckoning from Baltimore and New-York city, would meet, we have, by following either of our proposed courses, and the bed of the Susquehannah, a balance of 50 or 60 miles in our favor.

Some persons I have heard who consider Philadelphia as the great rival of New-York city in the benefits resulting from the improvements in the west. For my own part, I know not in what, nor about *where*, this rivalry will be, for if you will observe the face of the remarked country, where *their* feasible points of communication come out, they are at just such distances from any one point of *our own*, that any information from thence will rather benefit than injure *our* enterprise.

Who, conversant with the topography of both states, and acquainted with such matters, would advise, for the benefit and interest of our neighbor, a line of Railway from Philadelphia to Owego? I would, were I assured of our present inert, and, shall I say, culpable procrastination of our western railway for *ten years* to come, recommend a route of way *along the Hudson and canal, and so join the Ithaca road through the Cattatunc gorge*: I repeat, were we to procrastinate *ten* years longer. Let us look into the advantages of the contemplated route: We will take the one running through the north-eastern corner of Pennsylvania, and connecting itself with the Paterson road. All proposed routes that I have heard of yet, meet in Owego. Let us begin at the south, Here we would have the Paterson trade; that the iron, and Goshen, and Neversink trade, a great share of the lumber and ore trade of the Jerseys; new mines of wealth would be opened, and speculations would be profitable in the soil and produce of Sullivan, Delaware, Broome, and so on, along the whole line far west. Property would be brought out, and cultivation where is a wilderness.

A railroad company is chartered to run through Broome and Oneida, another from Utica to Watertown, in Jefferson county, (lateral arms these of powerful strength and extent, commanding a rich valley country, and much cultivated space,) the Binghampton lumber trade, the lumber, flour, grain, and plaster, demanded from the entire vicinity of Cayuga and Seneca, (and in time much farther,) by the Ithaca and Owego Railroad. Other railways will be made, but thus far, and without other aid, will suffice to cut off the Baltimore trade.*

When we arrive here we can branch off with profitable advantage far into Pennsylvania, some way down the Genesee, and so continue our direct line on to Portland, upon the shores of Lake Erie.

The whole route to Owego completed, the merchant at New-York city would get his produce to market from Rochester, by the way of the Ithaca road, in from 2 to 2½ and 3 days; later in winter, earlier in the spring, and at a cheaper rate than now.

If we look around this section of country, we will find chartered railways in every direction, waiting but for our great road to intersect every corner of these counties. The Ithaca Railroad, continued through Ovid to Geneva, Geneva to Rochester, and so on, by two other routes to Buffalo. In fact, we cannot now (neither could we of the Erie Canal,) compute the *number*, nor hardly *where* these little but vigorous finebriæ would extend to.

I have not entered into any particular calculations of the amount of the *present*, or *probable* trade; my intention is a communication to the public of such considerations as have come within my own observation. Such matters as those other I conceive to be the peculiar province and privilege of that gentleman who has probably bestowed more attention upon this subject, and is perhaps possessed of more general practical information (I will not yield to him in an interest in) respecting the route than any other individual—I mean Mr. Engineer De Witt Clinton.

As far as an interest in its construction along its proposed route may be satisfactory to those engaged in its welfare, I am assured, partly by observation, and in particular by the committee appointed from Tompkins county, (those two intelligent gentlemen, Judge Geer, and Mr. Bloodgood, the President of the Ithaca and Owego Railroad,) that along its whole route from Owego to New-York city, the inhabitants were rejoiced at its proposition. Mr. B., with a laudable spirit and generosity, travelled in the fall of 1831 through every principal town along its proposed route, appointing meetings, and gaining expressions of the inhabitants' feelings towards the proposed road, as we all know it was successfully chartered the following session of the Legislature.

From a want of decision in the *exact* route, from disputing whether it shall commence here or commence there, and from a very inert, though, strictly speaking, a just delaying, waiting for *Government* to commence, it has remained in pretty much the same state up to the present moment. The whole moment of this great national Appian way has with a great burthen rested upon, been borne up, and defended, by a *few* public-spirited men, the President and Directors of the Western Railway, and one or two more public-spirited individuals. Every one seems to be in favor of it, but no one will act. This should not be so. Why should New-York wait for Government to help *her*? Away with Government patronage; it is very good, but let others *beg* for it who need it more than we do. We have always got along without it, and still can. I aim, then, that we go to work on "our own hook." Call in your instalments upon your shares, give Mr. Clinton his instruments—not next year, but *now*—and set him to work. I know its difficulties, but he shall be cheered on. I have pioneered in some places he will have to go by; and, Mr. Editor, I want you to join with me in saying—Go on—go on!

G. Jr.

April, 1833.

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*Report of* Alexander Black, *Commissioner, to the Stockholders of the South Carolina Canal and Railroad Company.*

To Elias Horry, Esq. President:

Sir,—Having in my communications to the Directors, at their stated monthly meetings, furnished them with all the facts in relation to the road, requiring their consideration and direction, I shall, at present, omit every thing but what is necessary to enable the Stockholders to form an opinion as to the future prospects of the enterprise, appending data which will enable every one to judge for himself. My recent visit of examination on the western division of the line has enabled me to arrive with greater accuracy at the results stated in the summary. The execution of the work throughout this division of the line is of a very substantial and superior character, especially through the valleys of Horse and Wise creeks, where extensive sections of the trussel work have been substituted for the piling construction. In some cases the elevation of the

* When I was in Baltimore last November, I took considerable pains in inquiring into the Susquehannah trade of that city—found large and extensive store-houses rising up, the growth of its budding richness, and not a single individual whom I could hear of had regretted his investment of capital in that trade; on the contrary, I was told it was "a chief hope" of that city's prosperity. I have since been informed, that the last Maryland Legislature chartered a railway to run north along the Susquehannah.

grade of road above the surface of the country rendered this mode of construction indispensable, and in other cases, where the soil consists of soft mud, ten or twenty feet below the natural surface, its adoption was judicious, as the most effectual mode of acquiring solidity of foundation, and stability of structure. But there are portions of the work where a more economical mode of construction than that adopted would have answered the purpose, and comported better with the fiscal means of the Company. To the above causes may be ascribed in part the unexpected excess of expenditure over the estimated cost, on this division of the road, of which the Board were not duly informed, and consequently had not provided for. Though this excess may cause a temporary inconvenience, and has disappointed our expectations, yet it is a matter of regret that the means of the Company did not permit the introduction of this mode of construction in many places through swamps, difficult of access, either for repair or renewal, where the piles are used. There will be required to complete the work on this division of the line, $20,000, including $7,000 due the contractors and for back wages to the hands, and also $2,500 for the stationary engine-house: this amount however, does not include the construction of a depository, work-shop, &c. at Hamburg, the cost of which will be decided by the style of finish and size which the Board may consider proper.

A statement showing the actual cost of every department of the work, and of each branch of service, is now preparing. The classification of the accounts, by separating each item from the general account, and carrying it to its appropriate head, is nearly completed: without this statement it will be impossible to explain in a satisfactory manner the apparent discrepancy between the amount expended and the estimated cost of the road. Considerable sums have been judiciously invested, and other amounts necessarily expended, on objects not taken into consideration in forming the original estimate, nor chargeable to the cost of the road or the machinery used on it. I shall advert to a few cases, out of many, to sustain this remark.

There is invested in lands and improvements, $15,588 25, and in negroes $6,146 00. Felling trees to clear the track two hundred feet, in order to preserve the road against the danger it would have been liable to from the trees falling across it, and to shield it from the pernicious influence of their shade, averaging about $60 per mile, amounted to $7,200. It was nd experience that ditching was essential to solidity of foundation, although, at first, it was supposed to be unnecessary. This with lateral drains have constituted a considerable item of expense. The stock of tools and machinery, with the materials for future use, now on hand, may be estimated at $10,000, add to which preliminary expenses, office rent, stationary, agencies, camp equipage, and surveying instruments. The enterprise created a demand for labor far beyond the ability of the country to supply, and caused that increase in price which scarcity invariably produces. The only alternative left was to permit the work to languish, or to urge its completion at the market price of labor; the latter course was adopted as the most conducive to the interests of the Stockholders. During the last year the company and several of the contractors have been compelled to pay 50 to 75 per cent. more for labor than the price at which it was valued in the estimate.

The liberality exhibited by our State Legislature in granting the prayer of the Company's petition at their last session merits the warmest thanks of the stockholders, and evinces a spirit of liberality and a disposition to foster our infant enterprise. The citizens of Barnwell, who have ever evinced a lively interest in the prosperity of our enterprise, and to whose friendly co-operation the company are indebted for many valuable facilities in the progress of their operations, are now actually engaged in opening a communication between the court-house and the railroad, more direct, and in all respects better than that heretofore used.—There are three stations on this line, between which a spirited though friendly competition exists, to attract the trade and intercourse of the populous neighborhood of the village, and products of the fertile lands in the Edisto Fork. This competition must necessarily result in a manner favorable to the convenience of the public and the interest of the Company.

It is pleasing to reflect, and must ever be a subject of sincere thankfulness, that during the execution of our work, no accident has occurred involving either the loss of life or limbs of any of the workmen employed in the construction of the road, though their number has sometimes exceeded 2000, and has averaged 1500 the whole time; and also that during the last 12 months, though the trips performed have been more numerous and the number* of passengers greater than at any former period, no personal injury has been sustained by a single individual.

Our sole reliance for the conveyance of passengers and freight during the last four months has been on two engines of the smallest class, viz. the "Westpoint" and the "Phœnix," the "South Carolina" being under repairs the greater part of this time, and the "Charleston" having but recently arrived, contributed nothing to the increase of our cash receipts. Whatever may have been done by the "South Carolina" in the above period while in working order, is more than balanced by transportation of workmen, with iron and other materials, by the engines, to advance the work, which, of course, is not noticed in the cash receipts.

The performance of the West-Point during the 120 days has been as follows:

| | |
|---|---|
| 60 trips to Branchville, each 62 miles, is | 3720 |
| 52 trips to Midway, each 72 miles, is | 3744 |
| Aggregate, - - - - - | 7464 |

(The West-Point lost 8 days occupied in repairs.)

The performance of the Phœnix during the 120 days has been as follows:

| | |
|---|---|
| 60 trips to Branchville, each 62 miles, amounting in all to - - - - - | 3720 |
| 58 trips to Midway, each 72 miles, 4176, and 2 double trips, each 144—288, | 4446 |
| | 8184 |

(The Phœnix was employed every day during the 120.)

The total number of miles performed by the West-Point and Phœnix is 15,648, in 120 days.

The number of passengers that arrived and departed during the above period, (exclusive of attendants, officers of the company, clergy, contractor, and workmen, who had, during the progress of the work, passed free,) is 4109, or on an average 34 per diem. Cash receipts for freight and passage money, $11,526 78. By a reference to the detailed statement marked (B.) and hereunto annexed, it will be observed that there has been an uniform increase in the passage and freight money. On referring to previous cash receipts, I find the amount received the three first months of the present year to be greater than the amount received during the six last months of the past year. The operations were chiefly confined to the transmission of passengers, staple production of the country, light merchandize, and materials to advance the completion of the work. Horses, cattle, vehicles for travelling, staves, shingles, and other commodities of less profitable transportation, were necessarily declined.

In order that the Board may have an opportunity of estimating the comparative importance (as regards revenue and public intercourse) of the different stations or stopping places on the line, I have annexed returns for January and April, which will exhibit all the essential particulars in detail. My information

* The number of persons who have travelled on the road during the last twelve months are supposed to exceed 16,000.

in relation to the performance of the locomotives lately placed upon the railroads in the United States is not sufficiently minute to estimate the value of their performance, when compared with that of the "Phœnix;" but it is extremely questionable whether the same distance, divided into daily trips, has been accomplished without a single day's interruption by any other engine in the United States. Much credit is due to her engineer, Mr. Henry Raworth. It is known to the Board, but not to the public generally, that the engine now called the Phœnix was formerly the "Best Friend." It was built according to the plan, and under the personal direction of our talented and enterprising fellow-citizen, E. L. Miller, Esq. Its performance was tested on the 9th of December, 1830, on which occasion it exhibited a power much beyond that stipulated for in the contract; it was, therefore, accepted, and performed with entire success till the next summer, when the negro who acted as fireman, being incommoded by the unpleasant noise of the steam escaping through the safety valve, ventured on the expedient of confining it, by pressing the weight of his body on the lever-gage of the safety valve, which experiment resulted in the explosion of the boiler. At the time this engine was engaged, Mr. Miller led the van, among the advocates of steam over horse or other power for railroads. Public opinion was at that time much divided on the subject: the Baltimore and Ohio Company leaned in favor of horse power; nothing daunted by the weight of their authority, Mr. Miller persevered, and with an unyielding fixedness of purpose, proposed to construct an engine on his own personal responsibility equal to the best then used in England; he succeeded, and to him belongs the honor of planning and constructing the first locomotive ever worked in the United States.

Many of the Stockholders have expressed a strong desire that the Board should make trial of an English engine; the subject is properly referable to the chief engineer, and I should not advert to it only from the impatience of the public and the absence of that gentleman on official duties. So far as material, and the construction of the mechanical part, is a matter of consideration, it is doubtful whether any advantage would be gained, either in economy, strength, or execution of the work, by importing one locomotive from abroad. No one now thinks of sending abroad for vessels for commerce or steamboats. American skill and industry produce specimens of both, that excite the admiration of foreigners from every portion of the civilized world. They will, ere long, exhibit a similar success in the machinery used on Railroads. A little more experience alone is wanting to enable them to effect the object. It is also desirable that our wants should be supplied from a source not liable to be affected by the casualties of a long voyage, or by the interruption and risk consequent on foreign wars; indeed the policy of the Company would seem to dictate the enlargement of their own works, so as to furnish the entire road equipment within themselves; it might at the commencement be more expensive and troublesome, but would very soon be the most economical and satisfactory; for the work would be subject constantly to rigid inspection in all its parts, and all inducement either of interest or carelessness to slight the work would be removed. The many evidences of skill and ingenuity displayed in remodelling, and advantageously changing the arrangement of locomotives, at our workshops, afford abundant evidence that encouragement of our own workmen will be the best means of insuring a supply of our wants in this particular. There are considerations, however, which should have weight in making up a decision on so important a subject. Steam, as a moving power on roads, is still in its infancy, though no new principles have been discovered; the manner of applying those already known is the subject of almost daily improvement; and judg-

ing of the future by the past, there is every reason to suppose that the locomotives now in use will give place, before many years, to others of a more improved construction.

The engines, whose performances astonished even the scientific world, at the great prize competition on the Liverpool and Manchester Railway in 1829, are now laid aside to make way for others better calculated for the purpose. Since that period, genius and science, fostered by the great and the affluent, have been incessantly engaged in rendering the locomotive a powerful and efficient agent to railroads. A mass of talent and experience is therefore to be found there, which can be obtained no where else, and it will be for the Board to determine (after consulting the Chief Engineer) on the expediency of ordering one or more engines from England, for the purpose of testing their relative value with those constructed in this country.

The system of supervision which was introduced last fall, to protect, maintain, and keep the road in order for daily service, as communicated to the Board in my report of the 7th of January last, has fully realized my expectations. Monthly reports are received from the persons in charge of the several stations, exhibiting the aggregate of work done; from which the total cost per annum of maintaining and preserving the road can be ascertained, and those portions of the road most liable to derangement, or "wear and tear," corrected and strengthened by repairs and renewals. Serious apprehensions were entertained by some persons that the sinking of the piles in loose, uncertain, or wet soils, would be a great source of difficulty and expense. Indeed, it was not unreasonable to infer that a superstructure weighty in itself, extending one hundred and thirty-six miles, subject to enormous weights, passing rapidly over it daily, and depending for its support and permanency chiefly on posts driven into the ground, should yield in some places. The first five miles from the Lines, which was constructed as an experiment, exhibit more cases of this kind than four times the distance on any other part of the road. The experience gained there suggested the use of posts larger in size, and less pointed or tapering at the end inserted in the ground, which has obviated the evil. The mode of restoring the road to the true grade, when a depression is occasioned by this cause, is simple, efficient and economical, giving at the same time additional strength and permanency, and its execution is within the range of the duties assigned to the road police.* From the experience we have had, I am inclined to believe that the expense of repairing and keeping the road in secure travelling order, will fall within the amount per annum stated in the original suggestions on the subject, viz. twenty thousand dollars. On the Eastern Division of the road, the charge will be less than eight thousand, including materials. It has been found that opening works of this kind for the first year for public use, cost more than at any subsequent period. Many defects remain undetected, until the severe test of a regular performance is brought to bear on them. On examining the half-yearly statement prepared for the Stockholders of the Manchester and Liverpool Railroad, it appears that repairing the injuries sustained in one year after the road† was opened for the locomotives, cost fourteen thousand six hundred and sixty-two pounds sterling, for thirty miles, being upwards of three thousand dollars per mile, to repair and re-adjust the derangement produced by the steam cars, &c. in one year; and I am informed by a gentleman, who was engaged in constructing a canal one hundred and six miles in extent, at the north, that the repairs the first year it was opened for public use amounted to ninety thousand dollars; in addition to which, the same work sustained injury by a freshet, which cost thirty thousand dollars to repair, within two years after its completion.* It is not necessary, and indeed it would be invidious to go further in these statements, than the two cases referred to. As a general result, it may be affirmed that most works for conveyance or transportation, whether rail or turnpike roads, or canals, incur a greater expense the first year they are brought into operation, than the average cost of the next succeeding ten years. The plan adopted in the construction has been peculiarly fortunate; it has been emphatically called the "Inland Bridge"—recently it has proved itself so. At a time when every mail teemed with accounts of the disasters occasioned by the late heavy freshets, when the Savannah river rose higher than it has done since the memorable Yazoo freshet, when serious apprehensions were at one time entertained for the safety of the Augusta Bridge, when the houses in Hamburg were encompassed by water, and all communication between Hamburg, Augusta, and Barnwell Court-house, was suspended for three days, and resumed on the fourth, at the risk of losing the mail and the lives of those entrusted with its conveyance—when the navigation of the rivers was stopped, their banks strewed with the fragments of houses, mills, &c. the highland roads washed into gullies, and the bridges in the low country in many places washed away—at this period, so destructive to property, and when intercourse between various parts of the country was entirely stopped, it will be gratifying to the Stockholders to learn that, with the exception of the sliding of the side of a bank on the road (avalanche) within two miles of Hamburg, the works have not sustained injury to the amount of five dollars. During this whole period the trips were performed regularly in the usual time, and with the usual loads, and the passengers experienced no inconvenience, except that resulting from a moist atmosphere. Had the system of embankment which is generally resorted to in similar works, in order to preserve the grade over low grounds, been adopted in this work, it is probable that a large portion of it would this day have been a mass of ruins; as human sagacity could scarcely have anticipated the necessity of culverts sufficiently capacious to have afforded an outlet to such immense and overwhelming floods.

As the duties of my appointment will cease on the completion of the work, which may be shortly expected, at which time a new system for the permanent administration of the affairs of the Company will be necessary, and as this is the last annual communication which I shall have the pleasure of making to the Board, I will conclude by a summary of the proceedings of the Company since its formation. The books, according to the stipulation of the charter, were opened for subscriptions to the stock on the 17th of March, 1828. A moiety of capital only was subscribed. On the first Monday in May, 1828, the subscribers organized the Company by electing a Board of Directors, and appointing a Secretary. The Board, on entering on the delicate, arduous, and responsible duties imposed on them by the charter, and by the expectations of the public, found little to guide or enlighten their deliberations, from works of this character or construction elsewhere. It is true that the impulse which the railroad system in England had received, offered a powerful inducement to persevere under circumstances otherwise unpropitious; but the material, climate, soil, and resources, of the two countries were so essentially different, as to render all hopes of following the English plans altogether visionary and illusive. Nor were they more fortunate in turning their attention to the efforts of their sister States. Few works of this nature had then been contemplated, and but one (the Baltimore and Ohio) which at all approached in magnitude to that contemplated by the Board. All were in the incipient stages of progress, and the most that could be said of the best plans then proposed was that they were "*splendid theories.*" Their value was yet to be tested, by the infallible touchstone of experience. Unaided by examples elsewhere, with no precedent that could be followed with safety or confidence, the Board were thrown upon their own resources, and finally determined to construct a road five miles in length by way of experiment, on the novel and untried mode on which the road is now constructed, as best adapted to the climate, soil, material, and class of labor of the country, and also as being better suited to the finances of the Company. With what success, and how far judicious, is for the Stockholders and the public to determine.

Meantime the limited essays made in the railroad system responded favorably to the anticipations of the sanguine, and the important bearing of this enterprise on the future destinies of the State and city rendered it a subject of the most intense interest, not only to the capitalist, but to the patriot and the statesman. The Stockholders were convened on the 19th of August, 1830, at which meeting, stock sufficient to increase the capital to $581,340 was subscribed, and the Board authorized to commence operations, with a view to the completion of the entire line to Hamburg. The Board determined that the road should be surveyed, with a view to a definite location, and that the work should be placed uuder contract forthwith.

On the 5th of November, Mr. Allen, as Chief Engineer, with an efficient corps of assistants, commenced an examination of the route, with a view to a final location, and in the following June reported a line *fourteen miles shorter than had been expected from former examinations, and four miles less in distance than the most direct communication by the common travelling roads.* On the 28th of December, the first contract for the construction of four miles of road was concluded with Messrs. Gifford, Holcomb & Co. The balance of the eastern division was let out, as promptly as advantageous offers could be obtained, in small sections, so as to enlist all the efficient working force attainable in the vicinity of each.

On the 17th of March, 1831, the first contract (except four miles of swamp to Charles De Witt,) on the western division, was signed by Messrs. Gray & Couty for the construction of thirty miles of road, to commence the same on the first of May, 1831.

The balance of the western division, except 3½ miles on Savannah River Swamp, was placed under contract to Messrs. W. & J. D. Gray and General Ware, to commence on the first of June.

The eastern division to Branchville, 62 miles from the city, was opened for public travelling on the 7th day of November, 1832, being one year ten months and twenty-one days from its commencement.

On the seventh day of February, 1833, the road was opened for travelling to Midway, 72 miles. It is two years precisely, from the date of this communication, since the contractors engaged to commence the work on the western division.

The distance reported by the Chief Engineer being 136 miles, and taking the divisions of labor, embraced in the form of contracts, as an exemplification, the progress of the work stands thus: the track is opened by felling the trees 200 feet wide throughout the line, except

* The Road Police on the eastern division is adequate to keep the Road in a state of repair and security, under any increase of travelling, and a slight increase in the number of the clerks at the stations. Conductors and attendants on the cars will be competent to transact ten times the amount of business at present done. While, therefore, our expenditure has nearly reached its maximum, our income can scarcely be considered as commenced; and every day's operations will present the affairs of the Company in a more gratifying position.

† The Liverpool and Manchester road.

* Since the above was penned, I have found more unquestionable evidence of this statement, viz. in Document No. 101, being a report on Steam Carriages, submitted to the 22d Congress, 1st Session, page 180. The following is an extract in relation to the Mauch Chunk and Bristol Canal, 59† miles along the Delaware. "This canal, however, has not yet been brought into profitable use, on account of the extensive repairs which had to be made during the year 1831, and amounting to $97,339 51, or $1,629 per mile.

within about nine miles of the city, and a few miles in the valley of Horse Creek near Hamburg, which has been deferred, owing to the reluctance of some of the landholders to have their timber destroyed.

The excavations are entirely completed. Ditches and lateral drains sufficient for present purposes are formed. All the bridges to accommodate the public, neighborhood and plantation roads, are built.

The foundation, whether consisting of piles, sills, sleepers, or trussel work, is completed for whole distance of - - - 136 miles.

The caps and transverse pieces are permanently fixed on for the distance of - - - - 135¾ do.

The rails are laid and keyed for 134¾ do.

All requisite braces or stiffening to strengthen the road is completed for - - - - - 134 do.

The iron is spiked down permanently for - - - - - 98 do.

The surface is prepared for 24 additional miles.

Nine turnouts or passing places have been constructed.

Twelve pumps or watering places have been established.

The iron for Ware's contract 6 miles, is delivered, and the balance of the road has its surface prepared for the reception of iron, except about 14 miles.

RECAPITULATION.—The road to Branchville was opened for public travel on the 7th of November, 1832, which was, from the day its commencement was authorized by the Company—*two years two months and eleven days.*

From the day that the Engineers entered on their field duties—*two years and eleven days.*

And from the day the first contract was signed for its construction—*one year ten months and twenty-one days.*

In three months after it had been opened to Branchville, viz. the 7th February, it was opened ten miles further, crossing the Edisto River on a bridge constructed for the purpose, being 72 miles from the city.

All the iron, and locomotive power to convey it were now at our command, and the stationary engine should equal our expectation, the Western division might be completed one month from this date, which would be two years and one month from the day the first contract to commence the work was executed.

Amidst the many disappointments and difficulties necessarily arising in an undertaking so novel and extensive, it must be matter of consolation to reflect that the line of railroad now finished, on which our engines travel, is greater in extent (in consecutive miles) than any other in the world.

All which is respectfully submitted,

ALEXANDER BLACK,
*Commissioner S. C. C. & R. R. Co.*

Office of Commissioner, May 1st, 1833.

From the Notes appended to the foregoing Report, we take the following:

Extract from the rules defining the duties of persons acting as Road Police: "You are to ride over the section assigned to your care constantly going down on one side of the road and returning on the other, examining minutely every part of the road and correcting every defect, attending to the most serious first. And should any derangement occur, by accident or otherwise, beyond your means to repair in due time, call in the assistance of those on the adjoining stations. To attend especially to securing the wedges, and to correcting all deficiencies in the road, occasioned by the sinking of piles or sleepers; also to securing the rails where the spikes are drawn or broken. When these essentials are done, to employ the hands in clearing the road of weeds, underbrush, and other trash, that would subject it to injury by shade and moisture, or accidental fire. To be fully provided with a supply of fuel and water on the arrival of the engines, and keep a record of each day's work, mentioning particularly the quantity and nature of the work, the number of spikes replaced, &c."

Statement of the number of passengers conveyed, and the amount of cash receipts at the Depositories of Charleston, Branchville, and Midway, from the first of January to the 1st of May, 1833: Line Street, $8,645 92; Branchville, $2,369 24; Midway, $512 02; total, $11,527 18. Total number of passengers up, including stage passengers down, amount to 3,200; passengers down, from Jerico, 50; from Sineath's, 79; from Woodstock, 385; Summerville, 180; Laurence's, 60; Inabnet's, 69; George's, 45; way passengers from one intermediate station to another, 41; total, 4109.

Statements of locomotives, passengers, crank, freight, tender, and horse cars, on the line and at the depository, and the arrangements in train towards an increase of the same:

| | | |
|---|---|---|
| 2 | eight-wheeled locomotives, viz. South Carolina and Charleston, (6000, 7000,) | 13,000 |
| 2 | four-wheeled locomotives, viz. West Point and Phœnix, (4,000,) | 8,000 |
| 3 | first class passenger cars, outside bearings, (500,) - - - | 1,500 |
| 4 | second class passenger cars, inside bearings, (250,) - - | 1,000 |
| 4 | crank cars, one at Hamburg, one at Branchville, one on the line, and one at the depository, (220,) - | 880 |
| 10 | freight cars, outside bearings, (150,) | 1,500 |
| 9 | do. do. inside do. (180,) | 1,620 |
| 8 | tender do. 5 attached to the locomotive, and 3 in readiness, (160,) | 1,280 |
| 11 | lumber cars, 8 on the line and 3 at the depository, (135,) - - | 1,485 |
| 1 | fire light *a* $135, and 2 horse cars, *a* $250, - - - - - | 635 |
| 1 | sett of timber wheels, $65, and 13 tarpaulins for freight cars, *a* $9,75, | 191 75 |
| 50 | setts of springs *a* $50 is 2500, and 3 setts at $100, is 300, - - | 2,800 |
| | | $33,891 75 |

To the Editor of the American Railroad Journal:

SIR,—I am pleased to see that the Boston and Providence Railroad is pressed on with energy, though our Boston friends have exerted an influence unfavorable to this road, preferring that New-York should be kept at a respectful distance, and some depression has been occasioned here by persons who wished to purchase stock; yet the stock will regularly advance, and will, no doubt, stand as high, or higher, than other railroad stock in the United States.

Should any doubt, let them look at the facts! I think that the road will command as large an amount of transportation of passengers and merchandise as any in the country. By reference to the map it will be seen that no other route can interfere with it. Between this city and Philadelphia other roads may be built, and the canal may take a large amount of business, but from Stonington to Boston the route brings Providence nearly in a direct line, and no other road can rival its natural advantages.

Should any, without reflection, suppose that a line of boats will be run to Providence, let it be observed that, with fare at $6, they heretofore have not been profitable to stockholders: they make one passage, only, in two days, and that requires from 16 to 17 hours, whereas the boats to Stonington can make a passage every day, and not requiring births, would carry a greater number of passengers. The price from this to Providence will not be over four dollars, and the time required less than eleven hours.

Will boats run against such a competition? Certainly not. The transportation company will no doubt engage the present boats, to the advantage of their proprietors as well as their own. Besides passengers, the steamboats will have spare room for much freight, which can be delivered in Providence at less than insurance, interest, and freight of carrying it in other vessels to Providence, fitted out purposely for freight, without computing the advantage to the merchant of dispatch and certainty; as has been stated in the engineer's report, the Stonington road will be remarkably level, averaging only 12 feet per mile elevation; and the country abounds with the best materials for a railroad. The economy and saving to the company will be very great, by using timber to bridge across low lands, and to overcome the irregularity of surface, instead of incurring the expense of embankments.

I understand it is the determination of the directors to urge this work on with all practicable dispatch, that it may be completed even before the Boston and Providence. Engagements have been already entered into with the most experienced engineers, to superintend the work, and it is to be at once commenced.

O. Q.

*Amount of Power lost by Curves on Railways.*

By S. D. To the Editor of the American Railroad Journal.

SIR,—A very curious and very necessary table remains still a desideratum in the science of railways, which I am inclined to believe the observations of experienced engineers would be able to furnish us with—I mean of the amounts of power lost by curves on railways. This loss, for the sake of a ready perception of its value, I would oppose to a relative inclination in this manner, which would, I imagine, bear to fully elucidate a very important section of that branch of engineering:

| | | | |
|---|---|---|---|
| A curve of 5,000 feet radius is equal to a rise of, say | | | 1 in 200 |
| " | 1,000 | " | 1 in 150 |
| " | 600 | " | 1 in 100 |
| " | 200 | " | 1 in 50, &c. |

&c., always supposing the outer rail of the curve as in practice to be raised above the level of the inner rail.

I know that some experiments have been made with this view, but I have never met with an account of them, and, in common with many others, am anxious to learn the results of such experiments. It appears to me to be one of those chapters on railways least understood at present, and on which the greatest improvements remain yet to be effected. Very respectfully yours,

S. D.

Boston, May 12, 1833.

The subject referred to in the above communication we deem one of considerable importance, and shall be much obliged if some of our correspondents will furnish us with the desired information.—[ED. R. J.]

PRICES OF RAILROAD STOCKS.

| | | |
|---|---|---|
| New-York and Harlaem ..... asked | 99¾—offered | 99¼ |
| New-York and Albany..... | — — | — |
| Canajoharie and Catskill ..... | — — | — |
| Mohawk and Hudson..... (Branch). | 141 — | 140¼ |
| Do. | 94 — | 91 |
| Ithaca and Owego..... | | |
| Saratoga and Schenectady .... | 128 — | 127¼ |
| Fort Edward and Saratoga.... | 110 — | 107½ |
| Boston and Worcester ..... | 105 — | 102 |
| Boston and Providence..... | 115 — | 114¼ |
| N.York, Providence, and Boston | 106 — | 106 |
| Paterson and Hudson..... | 103 — | 102 |
| N. J. Railroad & Transp. Line.. | 110 — | 107¼ |
| Morris Canal ..... | 91 — | 90 |
| Delaware and Hudson Canal .. | 129 — | 129 |

MERCHANTS' EXCHANGE, NEW-YORK.

This building is situated on the south-west side of Wall street, on the corner of Hanover street, extending through to Exchange Place, having a front of about 125 feet in Wall street, and forming nearly a square. The basement story is occupied principally by the Post Office. On the principal story is the Exchange Room, which is 100 feet in length and 60 feet in width, with an arched ceiling suspended from the rafters of the building. It is constantly kept well lighted, warmed, and ventilated, and is attended by a person competent to give such information as strangers may require. The other parts of the building comprise the Stock Exchange, and various other offices devoted to mercantile pursuits, which are always in request.

In the dome is the Exchange Telegraph, connected with several stations in the harbor, the most remote of which is on the Highlands of Neversink, in the State of New-Jersey, the distance of which, in *a direct line*, is about 27 miles. This station is situated upwards of 400 feet above the level of the sea, and in clear weather commands a prospect of the offing, upwards of 30 miles in extent. The means of communication by the Telegraph are so easy, that any information can be conveyed through the whole line in less than five minutes.

In addition to the station on Staten Island, the proprietors have placed signal poles, which always show, during the day, the number of inward bound vessels in sight, and they form a guide for pilots, by whom they can be seen from the principal wharves in the city. These stations have been erected at great expense by the Company.

In the Exchange Room is a book, open to the public, in which the Telegraphic communications are entered immediately they are received.—[Amer. Mec. Mag.]

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TWINKLING OF THE FIXED STARS.—Having never yet seen any solution of the twinkling of the fixed stars, with which I could rest satisfied,* I shall offer the following, which may not perhaps be found an inadequate cause of that appearance; at least it has undoubtedly some share in producing it, especially in the smaller stars. It is not, I think, unreasonable to suppose that a single particle of light is sufficient to make a sensible impression upon the organs of sight. Upon this supposition, a very few particles of light, arriving at the eye in a second of time, will be sufficient to make an object visible, perhaps not more than three or four; for though the impression may be considered as momentary, yet the perception, occasioned by it, is of a much longer duration—this sufficiently appears from the well known experiment of a lighted body whirled round in a circle, which needs not make many revolutions in a second to appear as one continued ring of fire. Hence, then, it is not improbable that the number of the particles of light, which enter the eye in a second of time, even from Sirius himself, may not exceed three or four thousand; and from stars of the second magnitude, they may therefore not much exceed an hundred. Now, the apparent increase and diminution of the light which we observe in the twinkling of the stars, seems to be repeated at not very unequal intervals, perhaps about four or five times in a second: why may we not then suppose that the inequalities, which will naturally arise from the chance of the rays coming sometimes a little denser and sometimes a little rarer, in so small a number of them, as must fall upon the eye in the fourth or fifth part of a second, may be sufficient to account for this appearance? An addition of two or three particles of light, or perhaps of a single one upon twenty, especially if there be an equal deficiency out of the next twenty, would, I suppose, be very sensible; this seems at least probable from the very great difference in the appearance of stars, whose light is much less different than, I imagine, people are in general aware of; the light of the middlemost stars in the tail of the Great Bear does not, I think, exceed the light of the very small star next to it, in a greater proportion than that of about sixteen or twenty to one; and Bouger tells us in his *Traite d'Optique*, that he finds a difference in the light of objects of one part in sixty-six sufficiently distinguishable.

It will perhaps be objected, that the rays coming from Sirius are too numerous to admit of a sufficient inequality arising from the common effect of chance, so frequently as would be necessary to produce th iseffect, whatever might happen in respect to the smaller stars; but till we know what inequality is necessary to produce this effect, we can only guess at it either one way or the other; there is, however, another circumstance, that seems to concur in the twinkling of the stars, besides their brightness, and this is a change of color. Now the red and blue rays being very much fewer, I apprehend, than those of the intermediate color, and therefore much more liable to inequality from the common effect of chance, may help very much to account for this phenomenon, a small excess or defect in either of these making a very sensible difference in the color.

It will now naturally be asked, why the frequency of the changes of brightness should not be often much greater, as well as sometimes less, than that above-mentioned, and why the interval of the fourth or fifth, or some such part, should be pitched upon, rather than the fortieth or fiftieth part of a second, or than a whole second, &c.; for, according to the length or shortness of the time assumed, the changes that will naturally occur from the effect of chance will be smaller or greater in proportion to each other. The answer to this question will, I think, tend to render the above solution more probable, as well as to throw a good deal of light upon the whole subject. The lengths of the times then between the changes of brightness, if I am not mistaken, depend upon the duration of the perception before-mentioned, occasioned by the impression of the light upon the eye, than which they seem to be neither much longer nor shorter. Whatever inequalities fall within a much shorter time than the continuance of this perception, will necessarily be blended together, and have no effect, but as they compose a part of the whole mass; but those inequalities, which fall in such a manner that they may be assigned to intervals nearly equal to, or something greater than, the continuance of this perception, will be so divided by the imagination, which will naturally follow, and pick them out as they arise.—[Phil. Trans. 1767.]

* Some astronomers have lately adopted, as a solution of this appearance, the extreme minuteness of the apparent diameters of the fixed stars, which, they suppose, must in consequence of this be intercepted by every little mote that floats in the air; but, that an object should be able to intercept a star from us, it must be large enough to exceed the apparent diameter of the pupil of the eye; so that, if the star were a mathematical point, it must still be equal in size to the pupil of the eye.

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[*From the New-York Mechanics' Magazine.*]

Annexed is the engraving promised in our last, of the apparatus "for producing engravings of medals by machinery applied to the surface of the medal itself, or to the cast from it;" the description is by Mr. Hebert, Editor of the Register of Arts, and which we copy from the London Mechanics' Magazine. In our Analysis of the December number of that work, we omitted to state that the Editor had done ample justice to the claims America had to the invention, an oversight which we are glad to have an opportunity of rectifying.

"Fig 1—*a a* represents a portion of a table, to which is screwed a standard *b*, that receives the medal *c*, or other subject to be copied. To this table is also fixed a brass socket *d d*, in which a bolt *e*, fitted to it with great accuracy, is made to slide up and down by the agency of a fine threaded screw provided with a micrometer head at *g*, for the purpose of adjusting the motion through equal spaces. The vertical bolt *e* is surmounted by a strong plate or guide frame *h*, fixed to it in an inclined position; on the upper edge of this frame is a groove, in which run two or more rollers, or little conical edged wheels (as that seen at *i*), fixed to the under part of the upper part of a carriage *j*: this carriage has another roller at bottom, marked *k*, which runs upon a flat plate bolted to the table. This carriage, made of brass, has a flat steel plate *l l* passed through it, with conical edges moving against anti-friction rollers, and the upper edge of the steel plate is fixed the tracing point *m*, as will be hereafter more particularly described. *n* is a standard fixed to the tracer carriage, bearing a three-armed piece *o p q*; the lower extremity of the

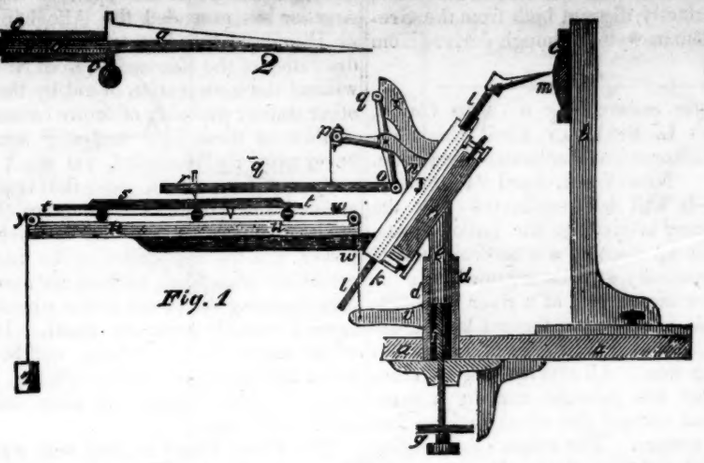

*Fig. 1*

*o* being jointed to a bar, which carries the etching point *r* over the copper or steel plate *s*, lying on its carriage *t t*, running upon a metallic stage *u u*. *v* is a metallic arm fixed to the socket *d*, and connected by a steel chain *w w* to a stud *x* in the under side of the plate carriage; to this stud is also attached a silken cord passing over a pully at *y*, suspending the weight *z*: the province of this weight is to draw the carriage plate backwards, as the tracing point passes over the projections of the medal, while the chain *w* draws the carriage forward as the tracing point passes into the cavities. In cases where the descent into cavities is perpendicular, or nearly so, to the plane of the middle, neither the common conical point, nor the tapering blade *m*, will reach the required spot; to obviate this difficulty, the patentee has inserted a very ingenious tracer of the blade form (fig. 2) —*a* is the blade, having an axis *b*, with the centre of motion coincident with one straight edge of the blade, *c c c c* represent a socket, into which the pivot *b* of the blade fits with great accuracy, but made to turn with facility; the nut *d* keeps the tracer up to its bearing, to prevent its shaking longitudinally. It is evident that this form of tracer will admit of its being passed down the perpendicular sides of any declivity, in whatever direction the perpendicular side may be."

The Journal of the Franklin Institute, for September last, contains an elegant engraved portrait of WILLIAM CONGREVE, the Dramatist, executed by Mr. A. Spencer, of Philadelphia, in the manner described, and has inserted the following proofs that the invention can be claimed for America.

"Believing that the credit of the invention of a machine for medal ruling is due to America, we will briefly set forth our proofs, and then speak of the improvements which of late years the method has undergone.

"The proofs to be given of the existence and state of a machine are to be derived from the results produced by it.

"In 1817, by the use of a machine which had been invented in Philadelphia, Christian Gobrecht, die-sinker, produced upon copper an engraving from a medal, having upon it the head of Alexander of Russia: from this engraving impressions were taken and distributed. One of these impressions we have seen.

"In 1819, Asa Spencer (now of the firm of Draper, Underwood & Co. bank note engravers,) took with him to London a machine of the kind above alluded to, which was designed principally for straight and waved line ruling. This machine was used in London during the year just mentioned, and the mode of ruling waved lines, and of *copying medals*, was then exhibited and explained by Mr. Spencer to several artists; particularly to Mr. Turrell, who took, by permission, a drawing of the machine, for the purpose of having one made for his own use.

"Little, however, was done in the way of medal ruling until about three years since, when a desire to apply the method to the engravings of designs for bank notes caused it to be revived by Mr. Spencer, who bestowed great attention upon it, and overcame the difficulties met with in the outset.

"The peculiar construction of this machine has never been made a secret, nor has it ever been patented, although prudential motives have required that it should not be minutely described, and thus be placed in the hands of those by whom its use might be perverted. In consequence of this free communication in relation to this machine, it is now made, with modifications in the details, for engravers, by some of our machinists. We have lately had the pleasure of inspecting one of beautiful workmanship, made by Messrs. Tyler, Fletcher & Co.

"The operations performed by this machine are the ruling of parallel straight lines at any required distances apart, and either continuous or broken; ruling converging straight lines; ruling waved lines, the waves being either similar or varying by more or less imperceptible gradations; and medal ruling, or transferring to copper the fac-simile of a medal without injuring its surface, the waved lines presenting a copy of the minutest parts of the medal.

"Mr. Bate is said, in the extract which we have given, to be engaged in *perfecting* a machine for medal ruling: in his patent he claims the improvements on a machine for that purpose. It is impossible to say how far this latter claim may be borne out, since a description of the patented improvements has not yet reached us.

"That Mr. Spencer has essentially *perfected* this machine, as far as beauty of execution and fidelity of representation in the work to be done by it are concerned, we do not hesitate to say; and that the public here, and our brethren of England, may be enabled to judge for themselves, we have obtained from Mr. Spencer a specimen* of medal ruling executed with his machine, an impression from which we give.

"The engraving is made from a copper medal placed in an embossed card of the ordinary kind. The surface of the medal bears not the slightest trace of injury from the machine, and even the yielding surface of the card is not roughened by it.

"An impression taken thus from a plate gives but a faint idea of the exquisite effect produced by engravings themselves made by this machine upon a polished surface of gold or silver.

"A series of the Napoleon medals, together with a portion of the series of medals struck in commemoration of the events of the first French revolution, attest the skill of Mr. Spencer."

The Journal of the Franklin Institute observes truly, that

"America *has been* without her journals to put forth the claims of her ingenious men, and the credit of more than one invention has passed from her to those who have been able to give greater publicity to their designs; but this day has passed away, and we find notices of the ingenious works of our countrymen transferred to the pages of foreign journals, to be appreciated and acknowledged abroad as well as at home."

That need be no longer a cause of complaint, our pages are open to all communications that have utility for their object, and we invite communications from inventors and practical men on all subjects relative to the Arts and Sciences.

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ARCHITECTURE.—Without entering deeply into the subject of Architecture, we propose to devote a portion of our succeeding pages to the explanation of the general and fundamental principles upon which this highly interesting and beautiful science depends.

The science of Architecture has at all times, and in all civilized countries, been considered not only a pleasing but a highly useful branch of knowledge.

The great utility of this science, and the elegant accomplishments connected with its study, have almost rendered a knowledge of its rules and principles necessary to complete a liberal education. But it is not our intention to bestow encomiums on the science, nor to give any thing like a detailed history of it, but to present our readers with a plain and condensed account of what may be termed its elementary principles.

Architecture is usually divided, with respect to its objects, into three branches, *civil*, military, and naval.

Civil Architecture, called also absolutely, and by way of eminence, *Architecture*, is the art of contriving and executing commodious buildings for the uses of civil life; as houses, temples, theatres, halls, bridges, colleges, porticoes, &c.

Architecture is scarcely inferior to any of the arts in point of antiquity. Nature and necessity taught the first inhabitants of the earth to build themselves huts, tents, and cottages; from which, in course of time, they gradually advanced to more regular and stately habitations, with variety of ornaments, proportions, &c. To what a pitch of magnificence the Tyrians and Egyptians carried *Architecture*, before it came to the Greeks, may be learned from Isaiah xxiii. 8. and from Vitruvius's account of the Egyptian Oeci; their pyramids, obelisks, &c.

Yet, in the common account, *Architecture* should be almost wholly Grecian original: three of the regular orders or manners of

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* "Various specimens of this work have been long since sent to London, and may be found in the possession of Messrs. Perkins and Heath, and of other artists."

building are denominated from them, viz. *Corinthian, Ionic,* and *Doric:* and there is scarcely a single member, or moulding, but comes to us with a Greek name.

Be this as it may, it is certain the Romans, from whom we derive it, borrowed what they had entirely from the Greeks; nor do they seem, till then, to have had any other notion of the grandeur and beauty of buildings, beside what arises from their magnitude, strength, &c. Thus far they were unacquainted with any other beside the *Tuscan.*

Under Augustus, *Architecture* arrived at its glory: Tiberius neglected it, as well as the other polite arts. Nero, amongst a heap of horrible vices, still retained an uncommon passion for building; but luxury and dissoluteness had a greater share in it than true magnificence. Apollodorus excelled in *Architecture,* under the emperor Trajan, by which he merited the favor of that prince; and it was he who raised the famous Trajan column, existing to this day.

After this, Architecture began to dwindle again; and though the care and magnificence of Alexander Severus supported it for some time, yet it fell with the western empire, and sunk into a corruption, from whence it was not recovered for the space of twelve centuries.

The ravages of the Visigoths, in the fifth century, destroyed all the most beautiful monuments of antiquity; and *Architecture* thenceforward became so coarse and artless, that their professed architects understood nothing at all of just designing, wherein its whole beauty consists: and hence a new manner of building took its rise, which is called the *Gothic.*

Charlemagne did his utmost to restore *Architecture;* and the French applied themselves to it with success, under the encouragement of H. Capet: his son Robert succeeded him in this design, till by degrees the modern *Architecture* was run into as great an excess of delicacy, as the Gothic had before done into massiveness. To these may be added, the Arabesk and Morisk or Moorish *Architecture,* which were much of a piece with the Gothic, only brought in from the south by the Moors and Saracens, as the former was from the north by the Goths and Vandals.

The architects of the 13th, 14th, and 15th century, who had some knowledge of sculpture, seemed to make perfection consist altogether in the delicacy and multitude of ornaments, which they bestowed on their buildings with a world of care and solicitude, though frequently without judgment or taste.

In the two last centuries, the architects of Italy and France were wholly bent upon retrieving the primitive simplicity and beauty of ancient *Architecture;* in which they did not fail of success: insomuch, that our churches, palaces, &c. are now wholly built after the antique. *Civil Architecture* may be distinguished, with regard to the several periods or states of it, into the antique, ancient, gothic, modern, &c. Another division of *Civil Architecture* arises from the different proportions which the different kinds of buildings rendered necessary, that we might have some suitable for every purpose, according to the bulk, strength, delicacy, richness, or simplicity required.

Hence arose five orders, all invented by the ancients at different times, and on different occasions, viz. Tuscan, Doric, Ionic, Corinthian, and Composite. The Gothic Architecture may also be mentioned here, for it is perfectly distinct both from the Grecian and Roman style, although derived from the latter.

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*Proposals for constructing a Steam Camel.* By JOHN L. SULLIVAN, Civil Engineer. To the Editor of the Mechanics' Magazine.

NEW-YORK, April 24, 1833.

SIR,—It will be recollected that the name of *camel* is given to the hollow floats, used to buoy up ships of war to cross barred harbors, especially at Amsterdam.

Wherever the current of a river meets the tide, a shoal is of course formed by the deposition of sediment, and may at length obstruct navigation. All that *art* can do, then, is to contract the passage, and by a more rapid current compel the shoal to form further down stream. The effect of dredging is but partial and temporary. Vessels might be fitted out for foreign voyages, at Albany, and the largest class of coasters come to this port, but for this obstruction.

The *Overslough* is becoming a more sensible impediment to vessels since the increase of the population and trade at this city. Being the seat of government, and the meeting of the lakes and the ocean, it might become very commercial.

In case no permanent work should be devised to remedy the inconvenience of this shoal, it has occurred to me that a *steam camel* is capable of being made, at once to raise and bear vessels of any size over it.

Having acquired the right to the recent improvement made in steamboats by Mr. Blanchard, for the North River Companies, I have invented, by the combination of two of them, with machinery, the instrument to which I have given the name of the *steam camel.*

The *peculiarity* of his boat was essential to its construction. It required that their hulls should be exceedingly light, yet very *stiff,* because vessels sit in the water according to the weight on board, and the displacement that equals it. The greatest weight will be in the broadest part of the vessel, but when she is lifted out that burden is transferred to the buoyant vessels, (or camel,) and will come on them somewhat unequally. And if so, their vertical strength must be such that one end may be depressed without injury to the other: she must be incapable of changing her vertical shape.

The requisite lightness and stiffness of this vessel is owing to her frame being composed of *arches.* These arches are vertical and opposite, and their ends are connected strongly: they are then braced apart by cross studs, and then tied together by screw bolts close to each stud. Thus combining the strength of the column with the longitudinal strength of the fibre of the wood of the curves.

Two such frames placed parallel and vertical, and resting the inverted arch on the floor timbers, the hull receives any desired model. The ends project far enough to bear up the impelling wheel, which is thus placed at the stern, and others may, for great speed, be placed also at the sides. The cylinders lay horizontal, in connection with the frames, and thus the most vigorous action of the engine can be well sustained. This kind of steamboat draws about *one foot,* all on board. So far as we have experience, her performance is extraordinary. One runs up the Connecticut, over Enfield falls, between Hartford and Springfield; another runs up the Kennebec, from Gardiner, over the rapids, to Waterville. Another has ascended the Alleghany as far as Hamilton, the key to a direct trade with the valley of the Mississippi, from New-York, without the intervention of aid by the laws of other states: probably of future consequence.

Two of these light and stiff steamboats being properly *connected,* yet apart sufficiently to come on both sides the vessel to be assisted, she is lifted as much out of the water as is requisite, by means of their steam power, and the application of the machinery, combined with them, to form the *camel;* and then applying the power to the wheels, she is carried quickly over the shoal. Thus any vessel might load at Albany, and be carried below the shoals, or be brought up, loaded; and sea vessels brought up more easily than to New-Orleans.

The Dutch camel is filled with water, and brought under the sides of the ship, when, on being *pumped out,* they buoy her up; but this is a slow process. The impatient trade of the Hudson requires the most active aid. In five minutes the vessel should be raised, and in ten more set down. The specification of this improvement is too long for insertion in this place. This notice serves merely to show that the nature of the shoal is such as not to permit of a radical remedy, but may be thus practically surmounted.

JOHN L. SULLIVAN, Civil Engineer.

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*On the Methods of describing various Curves for Arches.* By J. THOMSON, Civil Engineer, Nashville, Tenn. [From the American Journal of Science.]

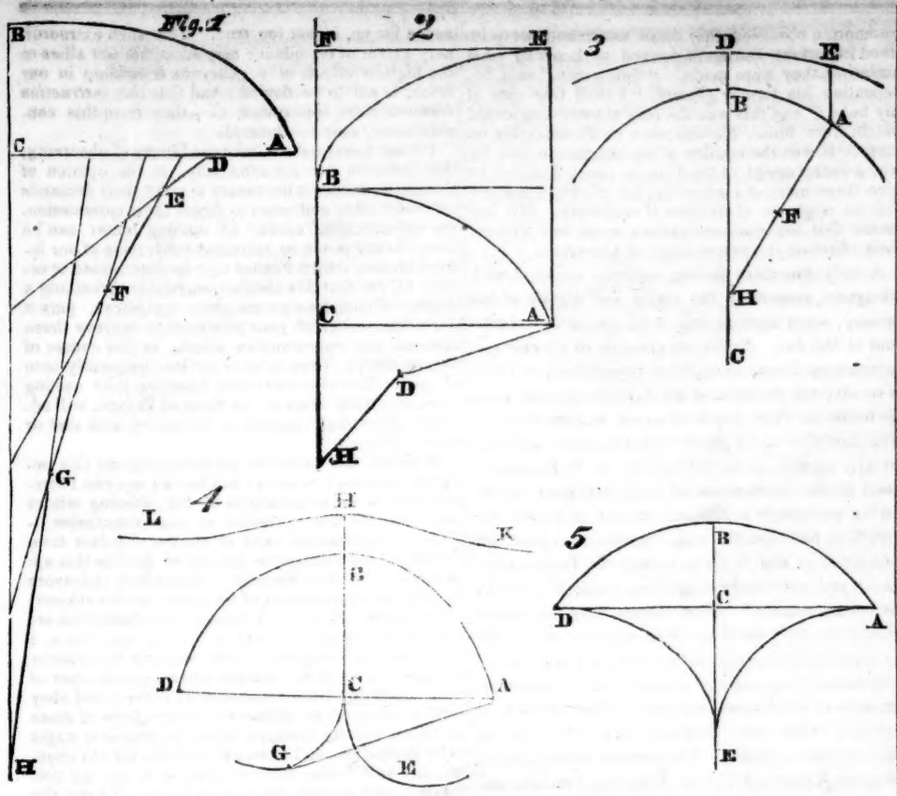
MR. EDITOR—The following observations on the methods of tracing various curves for arches are submitted for publication in the American Journal, with the hope that they may be found useful to mechanics, by saving the time and labor of tedious calculation.

The merely practical mechanic, unacquainted with algebraical calculations, is still uninformed in regard to the method of finding the point D (fig. 1), or the distance C D, the determination of which is the only difficulty he will encounter. The distance C D, in that communication, is only expressed in indefinite parts, and not by means of a quantity derived from the ratio of A C to C B.

In order to find C D, *divide the difference of the rise and half span* of the arch by the following decimal numbers:

For five centers, divide by 0.794.
For seven centers, ' ' 0.771.
For nine centers, ' ' 0.758.
For eleven centers, ' ' 0.749.

The method of finding these divisors will be given hereafter. It may be observed that the last divisor is nearly =0.75, hence when eleven centers are used, multiply the above difference of rise and half span by 4, and divide by 3, the result will be the distance C D. Having found C D, make C H=3 C D. Take one from the number of centers to be used, and half the remainder will be the number of parts into which C H and C D are to be divided; C H into *equal* parts, and C D into *unequal* parts, increasing from D as 1, 2, 3, &c. Join these points of division, as in the figure, by straight lines, whose intersections will give the centers H, G, F, &c. Thus, when nine centers are used, as in the figure, C H is divided into four equal parts, and C D into the same number of unequal parts, increasing as 1, 2, 3, 4, from the point D.




To find the above divisors, put C D=$y$, A D=$x$ and the given quantities A C=$a$, and B C=$d$. Now when the number of centers is given, the broken line H D is equal to C D multiplied by a constant quantity; put this constant quantity =$c$, then H D=$cy$, and since the broken line A H must be equal to B H, we have

$x+cy=d+3y$, whence
$x=d+y(3-c)$, and since
A C=A D+C D,
$a=y+d+y(3-c)$, hence

$$y=\frac{a-d}{4-c}=\text{C D}.$$

In order to apply this general equation, $c$ must be calculated for the required number of centers. For five centers, take C D= any assumed quantity, say three; then by trigonometry we find the sum of the lines that constitute H D=9.619, hence $c=\frac{\text{H D}}{\text{C D}}=3.206$. In the same way we find for seven centers $c$=3.229, and for nine centers $c$=3.242, and for eleven centers $c$=3.251. Hence we have for

Five centers, $\text{C D}=\frac{a-d}{0.794}$

Seven centers, $\text{C D}=\frac{a-d}{0.771}$

Nine centers, $\text{C D}=\frac{a-d}{0.758}$

Eleven centers, $\text{C D}=\frac{a-d}{0.749}$

Since it is thus almost as easy to trace an oval arch with nine or eleven centers as with three, the description of this arch by means of three centers ought always to be avoided, as it is not only disagreeable to the eye, but it is deficient in strength, in consequence of the sudden change of curvature resulting from this mode of description.

Perhaps no curve unites beauty and strength in a greater degree than the cycloid. The arch, equilibrated by a horizontal road-way, is remarkable for strength, but it is deficient in beauty. The elliptic arch is perhaps the most graceful, but when the rise is small, compared with the span, it will not admit of great pressure with safety at the crown. The cycloidal arch, with the same rise and span with an elliptic arch, is more curved at the crown than the latter, and hence it will sustain a greater weight at that point, such as a heavy load passing over it. We are not at liberty, however, to choose the ratio between the rise and span of this arch, these being always to each other as the diameter of a circle to the circumference.

The mechanical construction of the cycloid is very easy. The following method I have not seen noticed in any work on Mechanics. Having fixed upon the dimension of the half span A C, (fig. 2,) take the rise B C such that A C will be to B C as half the circumference of a circle to the diameter, the lines F H and A E being parallel to each other, and perpendicular to A C, and make C H=C B. Let the describing line taken equal to B H or twice B C, be extended from H to A, and brought to a proper tension by means of the point or pin D. The curve A B is then described with the centers D and H. This curve will be an approximation to the cycloid. Fix a number of centers (the more the better) along the curve A B, and with these centers describe the curve B E, which will be a cycloid as near as can be obtained by any mechanical means. If, instead of a single point, D, three or four points be taken as centers between H and A, so arranged as to be nearly in a cycloidal curve, and keeping at the same time the line A D H at its proper tension, the resulting curve A B will itself be a very near approximation to the cycloid; but not much greater sensible accuracy can be attained in the second curve B E, than when a single point D is first assumed.

The above method of tracing this kind of arch is derived from the principle, that when any curve or broken line A D H is assumed between the parallel lines A E and F H, the successive developments or involutes A B, B E, &c. between the same parallels, constantly approach to, and finally terminate in a cycloid. These involutes converge so rapidly to the form of this curve, that when the above method is adopted, the second involute B E may always be assumed in practice as the required curve.

One advantage that might be mentioned, in tracing curves for arches with a variable radius, is that we may always obtain the height of the road-way above any point in the arch, such that it may be equilibrated by the superincumbent weight. Thus, let D E (fig. 3) represent a road-way passing over the arch A B, let B C=radius of curvature at the point A, D B=height of road-way at the crown, then we have $\text{A E}=\frac{\text{D B}\times\text{B C}}{\text{A F}\times(\cos \text{A H B})^3}$.

An arch that will require a gentle elevation of road-way at the crown, in order to produce equilibration, may be described by the following method. Let A D, (fig. 4,) represent the span of the arch, B C the rise; describe an arc C G of a circle on D C as a diameter; extend the describing line from A to G, where it is a tangent to the circle; the line being fixed at G, describe the half arch A B with centers arranged along the curve C G, and in the same manner describe the half arch B D with centers on C E. If the span A D be=100, A G will be=70.7, and hence the rise B C will be 40. It will be found from the above equation that this arch will be nearly equilibrated by a road-way of the form of L H K, gradually rising at the crown of the arch, when H B is taken equal to about one-fourth of the rise.

A very graceful arch may be described (fig. 5) by centers arranged along circles tangent to the span and axis of the arch, at the points D, E, and A, E. This arch will also admit with safety a horizontal road-way. The span of this arch will be to the rise as $2r$ to $\frac{1}{4}c-r$, $r$ being the radius of a circle, and $c$ the circumference, or the ratio will be as 1 to 0.2854. The use, however, of arches of this description is limited to cases where we are at liberty to adopt the constant ratio that necessarily exists between their rise and span.

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*Stucco for walls.*—In Italy great use is made of a stucco which gives to walls the brilliancy, the cleanliness, and almost the hardness, of marble. It may be variously colored, to suit the taste of the employer. This stucco is made very easily, by mixing lime and pulverized marble, in nearly equal proportions, according to the meagerness or richness of the marble. A paste or mortar is made of this mixture, and applied to the wall in the thickness of a five-franc piece, with a trowel wet with soap suds, and in such a way that the whole of the wall may be finished in the same day. None but mineral colors should be mixed with the stucco, as the lime would destroy those derived from the vegetable kingdom. To obtain the greatest brilliancy, the mortar should be applied with a cold trowel. Workmen, for the sake of ease and expedition, usually employ it warm. Chips and fragments of marble may be advantageously employed for this purpose. In cases where the appearance of a marble wall would be objectionable on account of its coldness, any portion of it may be covered with paper.

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If you do not hear reason, she will surely rap your knuckles.—[Franklin.]

NEW-YORK AMERICAN.

MAY 18, 20, 21, 22, 23, 24—1833.

## LITERARY NOTICES.

THE LIFE OF JOHN JAY, WITH SELECTIONS FROM HIS CORRESPONDENCE AND MISCELLANEOUS PAPERS, by his son WM. JAY: 2 vols. 8vo. 500 pp. N. York; J. & J. Harper.—"I have long been convinced that human fame was a bubble, which, whether swelled by the breath of the wise, the good, the ignorant or malicious, must burst with the globe we inhabit. I am not of the number of those who give it a place among the motives of their action. Neither courting nor dreading the public opinion on the one hand, or disregarding it on the other, I joined myself to the first assertors of the American cause, because I thought it my duty; and because I considered caution and neutrality, however secure, as being no less wrong than dishonorable." In this brief extract from one of his own writings—a history of his Spanish Mission—we have an epitome of the character of John Jay. Such as it was, when he first joined himself, in 1774, to the American cause, such it continued to be till, in 1829, at the advanced age of 84 years, death put his final seal upon a lofty and unblemished career.—It is impossible to read these volumes without feeling unqualified admiration for the high motives, the singleness of purpose, the purity, the energy, the zeal and the ability, to which every page of them bears such ample and irrefutable testimony. Time is the great Revealer—the great Justifier. That public man who can stand before posterity in the presence of Truth—and have his whole career opened—his inmost views and feelings scanned—and his opinions—often perhaps at the time hastily but imperishably, recorded—adduced in evidence and contrasted with each other—whose age can be confronted with his youth—and his public with his private life—and can pass this ordeal unscathed—may be ranked among the Great and Good. Such a man was John Jay; and the cause of virtue and true patriotism is deeply indebted to the son, who, by the publication of these memoirs, has so signally served *it*, while he discharged a sacred duty to a father's fame.

We have not room—nor for the great majority of our readers can it be necessary—to furnish a sketch, however slight, of the public life and services of Mr. Jay. These are already a part of our history. We must content ourselves therefore today, with culling here and there some of the less known incidents and personal characteristics developed in these pages.

While the second Congress in 1775 was sitting in Philadelphia, the following incident, of which we do not remember seeing any previous notice, occurred, as related by Mr. Jay:

Some time in the course of this year, probably about the month of November, Congress was informed that a foreigner was then in Philadelphia, who was desirous of making to them an important and confidential communication. This intimation having been several times repeated, a committee consisting of Mr. Jay, Dr. Franklin, add Mr. Jefferson was appointed to hear what the foreigner had to say.—These gentlemen agreed to meet him in one of the committee rooms in Carpenter's Hall. At the time appointed they went there, and found already arrived an elderly lame gentleman, having the appearance of an old wounded French officer. They told him they were authorized to receive his communication; upon which he said that his Most Christian Majesty had heard with pleasure of the exertions made by the American colonies in defence of their rights and privileges; that His Majesty wished them success, and would, whenever it should be necessary, manifest more openly his friendly sentiments towards them. The committee requested to know his authority for giving these assurances. He answered only by drawing his hand across his throat, and saying "Gentlemen, I shall take care of my head." They then asked what demonstrations of friendship they might expect from the King of France. "Gentlemen," answered the foreigner, "if you want arms, you shall have them; if you want ammunition, you shall have it; if you want money, you shall have it." The committee observed that these assurances were indeed important, but again desired to know by what authority they were made. "Gentlemen," said he, repeating his former gesture, "I shall take care of my head:" and this was the only answer they could obtain from him. He was seen in Philadelphia no more. It was the opinion of the committee that he was a secret agent of the French court, directed to give these indirect assurances, but in such a manner that he might be disavowed if necessary. Mr. Jay stated that his communications were not without their effect on the proceedings of Congress.

A truly American feeling on every question with foreigners respecting the rights and dignity of his country, was a marking trait in the character and conduct of Mr. Jay. Under the pressure of adverse circumstances Congress suffered themselves, in 1781, to receive the dictation of the French minister as to the terms on which alone American ministers in Europe should treat for peace with England; and they actually agreed, on the proposition of *M. Gerard*, to insert in the instructions of their ministers the following paragraph additional to that in which the American functionaries were directed to repose full confidence in, and freely to consult the French cabinet—"and ultimately to govern yourself by their advice and opinion." John Adams, then minister in France, having been found of too sturdy honesty, and too sagacious judgment, for the purposes of Count de Vergennes, Congress was induced, chiefly by the importunity of the French minister in Philadelphia, to associate other four Commissioners with him, in order to treat of peace. The persons selected were John Jay, Thomas Jefferson, Benjamin Franklin and Henry Laurens. Mr. Jay, when he received his new commission with the instructions just alluded to, was in Madrid. How they affected him will be perceived by the following letter—admirable not less for unaffected personal humility, than for high and genuine pride of country:

*To the President of Congress.*

ST. ILDEFONSO, 20th. SEPT. 1781.

*Sir*,—Your excellency's favor of the 5th July past, with the papers therewith enclosed, were delivered to me on the 29th ult. by Major Franks, whom the procrastination of the minister still obliges me to retain.

The new commissions with which Congress have honored me, argue a degree of confidence which demands my warmest acknowledgements; and which, so far as it may be founded on an opinion of my zeal and integrity, they may be assured will not prove misplaced.

At the commencement of the present troubles I determined to devote myself, during the continuance of them, to the service of my country, in any station in which she might think it proper to place me.—This resolution, for the first time, now embarrasses me. I know it to be my duty, as a public servant, to be guided by my own judgment only in matters referred to my discretion; and, in other cases, faithfully to execute my *instructions* without questioning the policy of them. But there is *one* among those which accompany the commissions, which occasions sensations I never before experienced, and induces me to wish that my name had been omitted.

So far as personal pride and reluctance to humiliation may render this appointment disagreeable, I view it as a very unimportant circumstance; and should Congress, on any occasion, think it for the public good to place me in a station inferior and subordinate to the one I now hold, they will find me ready to descend from the one, and cheerfully undertake the duties of the other. My ambition will always be more gratified in being useful than conspicuous; for, in my opinion, the solid dignity of man depends less on the height or extent of the sphere allotted to him, than on the manner in which he may fulfil the duties of it.

But, sir, as an American, I feel an interest in the dignity of my country, which renders it difficult for me to reconcile myself to the idea of the sovereign independent States of America submitting, in the persons of their ministers, to be absolutely governed by the *advice* and *opinion* of the servants of another sovereign, especially in a case of such national importance.

That gratitude and confidence are due to our allies is not to be questioned; and that it will probably be in the power of France almost to dictate the terms of peace for us, is but too true. That such extraordinary extent of confidence *may* stimulate our allies to the highest efforts of a generous friendship in our favor, is not to be denied; and that *this instruction* receives some appearance of policy from this consideration, may be admitted.

I must, nevertheless, take the liberty of observing, that however our situation may, in the opinion of Congress, render it necessary to relax their demands on every side, and even to direct their commissioners ultimately to concur (if nothing better can be done) in any peace or truce not subversive of our independence, which France may be determined to accede to, yet that this instruction, besides breathing a degree of complacency not quite republican, puts it out of the power of your ministers to improve those chances and opportunities which, in the course of human affairs, happen more or less frequently unto all men. Nor is it clear that America, thus casting herself into the arms of the King of France, will advance either her interest or reputation with that or other nations.

What the sentiments of my colleagues on this occasion may be, I do not as ket know; nor can I foresee how far the negotiations of the ensuing winter may call for the execution of this commission.—Thus circumstanced, and at such a distance from America, it would not be proper to decline this appointment. I will, therefore, do my best endeavors to fulfil the expectations of Congress on this subject; but as for my own part, I think it improbable that serious negotiations for peace will soon take place, I must entreat Congress to take an early opportunity of relieving me from a station where, in character of their minister, I must necessarily receive and obey (under the name of *opinions*) the directions of those on whom I really think no American minister ought to be dependent, and to whom, in love for our country, and zeal for her service, I am sure that my colleagues and myself are at least equal. I have the honor to be, &c. JOHN JAY.

While Mr. Jay was in Paris, a Commissioner to treat for peace—Mr. Oswald being the British Commissioner—the following anecdotes are recorded. It is matter of regret certainly that Mr. Jay's opinion, as to their exactitude and authenticity, was never ascertained:

In Mr. Jay's diary are found two extraordinary anecdotes, which, if true, convict the French government of a degree of perfidy and baseness rarely paralleled in history.

21st October, 1782.—Visited Mr. Oswald; he told me that a Mr. Pultney had within a few days arrived here to place his daughter (a rich heiress) in a convent; that Mr. Pultney in confidence gave him the following anecdote, viz: That in the latter part of last winter, or beginning of last spring, there was an Englishman of distinction here who, in conversation with a friend of Mr. Vergennes, expressed his regret that the affairs of America could not be so arranged as to lead to peace. The friend mentioned this to Vergennes, who agreed to admit the Englishman to an audience on the subject. Accordingly, the Englishman and this friend waited upon the minister, who, in the conference, offered to divide America with Britain, and in case the latter agreed to the partition, that the force of France and Britain should be used to reduce it to the obedience of the respective sovereigns. On parting, the minister said that in case this offer should not be accepted, he reserved to himself the right of denying all that he had said about it; that this offer was refused, and that the friend in a letter to the Englishman had expressed his regret on the subject. Mr. Oswald told me further, that Mr. Pultney assured him that he received this information from the Englishman's own mouth. Mr. Oswald spoke handsomely of Mr. Pultney's character. I advised him to trace the matter further, and if true, to get it properly authenticated, which he promised to do.

It appears from the date of this anecdote that it was told to Mr. Jay after the preliminary articles had been agreed on by the negotiators, but before they had received the assent of the British cabinet. It may therefore be supposed that the object of the communication was to prejudice the American commissioner against the French court, and thus to induce him more readily to yield to the objections which England might possibly make to the articles. Such a supposition will not apply to the following narrative, which was not given till after the preliminary treaty was signed, and all the great points in dispute finally settled.

22d December, 1782.—Between 7 and 8 o'clock this evening I visited Mr. Oswald. After some general conversation he took occasion to say that Lord

Mount Stuart, the son of Lord Bute, had dined with him to-day; and that he had also seen his brother, Col. Stuart, who had served the whole war in America. He spoke of the Colonel's aversian to the American war, and the account he gave of the want of discipline and the disorder which prevailed in the British army there. He passed several encomiums on the Colonel's character; sometimes of the father and then of the son's, observing how unlike they were to what the father was supposed to be; though for his part, he believed that more sins were laid on his back than he had ever committed. He said that Lord Mount Stuart execrated the American War, and had shown him to-day several letters written by him at Turin (where he was ambassador) to Lord Hilsborough on that subject. Mr. Oswald asked me if I remembered what he had told me of Mr. Pultney's information about the proposition of Count Vergennes, to divide America with Britain. I told him I did. 'Well,' says he, 'the same kind of proposition was made to Lord Mount Stuart. His Lordship brought with him here to dinner his letter-book, which he did not choose to leave with his Chargé d'affaires, and in which he showed me his letters written with his own hand, (for he would not confide it to his secretary) to Lord Hilsborough; and the first letter written was dated in the month of September, 1780; from which it appears that a Mr. Mally, who had formely traveled with Lord Mount Stuart, and is an honorary professor at Geneva, and is employed to write the history of Hesse, &c., for which he receives annuities; a man, in short, well known among men of letters, was employed by Mr. Neckar to make overtures to Lord Mount Stuart, about putting an end to the war, by dividing America between Britain and France, the latter to have the eastern part.

Mr. Oswald also says that Lord Mount Stuart went to Geneva on the occasion, where he conversed with Mr. Mally, and that his lordship read to him out of his letter-book French letters from this Mr. Mally to his lordship on the subject, after his return to Turin: that this correspondence contains a very curious and particular account of French intrigues, particularly that Neckar wished for peace, because his system could only raise money enough to provide for old arrears and for current expenses; and were he obliged to sustain the expense of the war, he must break in upon it, and perhaps be disgraced; it also mentioned the intrigues to get De Sartine out of the marine department; and Mr. Oswald says that the overtures about America were conducted with a variety of precautions for secrecy, and with a stipulation or condition that both parties, in case they did not agree, should be at liberty to deny all that passed. He told me that my lord wrote strongly to Lord Hilsborough against the American war, and that the latter in answer told him it was a subject out of his line, and with which it was not proper for him to interfere. Lort Mount Stuart was offeuded with the Minister for this, and he brought his letter-book with him to Mr. Oswald to show him the full state of the matter. Mr. Oswald said, that as he had told me the affair of Mr. Pultney, he could not forbear mentioning this also, for it was a little strange that so extraordinary a matter should come so circumstantial and correspondent from such different and unconnected quarters. He desired me to consider this communication as very confidential, adding that he could say more, but that it wouln not be proper for him at present to enter into a detail of further particulars.

The high respect entertained for Mr. Oswald by the American commissioners precludes all suspicion that the facts above related were fabricated by him. How far he was imposed upon by his informants, how far his informants were themselves deceived, and how far these relations are correct or otherwise, are questions which probably will never be fully answered. It is not known what were Mr. Jay's sentiments on the subject. He recorded at the time the information he rec'd, but without comment.

"Aptitude to change in any thing never made a part of my disposition, and I hope makes no part of my character." It is thus that Mr. Jay speaks of himself, to an old and valued friend, the late *Peter Van Schaack* of Kinderhook, who having embraced the King's side in the quarrel with the mother country, had gone to London, and was separated by distance as well as feeling from the former loved associate of his youth, Mr. Jay. When Mr. Jay was the minister of the independent United States at Paris, Mr. Van Schaack wrote a letter to him, communicating his own unaltered regard for the friend of his early life, but expressive of uncertainty as to the present feelings of that friend. The reply of Mr. Jay commences with the sentiment above quoted, and it led to an interchange of letters which we would gladly quote here, as examples of enlightened liberality of sentiment and real toleration of that hardest of all things to be tolerated, difference of opinion and practice. The correspondence, so honorable to both, will be found at p. 159, *et seq.*

We find ourselves compelled to break off from this work; but as we hope to return to it once and again, we conclude with an extract from a letter in the 2d volume, showing that on minor, as well as higher subjects, the views of Mr. Jay were always just, manly, and in good taste:

We remove next week to Aranjuez, where I expect again to spend some agreeable weeks. It is a charming place, containing a tract of several miles in circumference, and divided into gardens, meadows, parks, cultivated grounds, and wilds, full of fine trees, fine roads, and fine walks, and watered by a slow winding river, which, if more clear, would be very beautiful. But still, my friend, it is not America. A genius of a different character from that which presides at your hills and gardens reign over these. Soldiers, with fixed bayonets, presents themselves at various stations in these peaceful retreats; and though none but inoffensive citizens are near, yet horsemen with drawn swords, guarding one or other of the royal family in their excursions to take the air daily, renew and impress ideas of subjection. Power unlimited, and distrust misplaced, thus exacting homage and imposing awe, occasion uneasy reflections, and allay the pleasing sensations which nature, smiling in such delightful scenes, never fails to excite. Were I a Spaniard, these decorated seats would appear to me like the temporary enchantments of some despotic magician, who, by reextending his wand, could at pleasnre command them to vanish, and be succeeded by galleys and prisons.

Nothing is more true, than that all things figure by comparison. This elegant seat being surrounded by extensive wastes, appears like a blessed and fortunate island in a dreary ocean. The contrast heightens its charms, and every traveller arrives with a mind predisposed to admire and enjoy them; but as the first impression wears away, and he begins to recollect the more happy, though less magnificent abodes in his own country, the attractions and allurements of this insensibly diminish. I have more than once experienced this, and though not difficult to please or be contented, yet I confess that I find little here that resembles, and nothing that can compensate for the free air, the free conversation, the equal liberty, and the other numerous blessings which God and nature, and laws of our making, have given and secured to our happier country. I would not be understood to insinuate, that good society and agreeable companions are wanted here. They may perhaps, abound more in some other parts of the world, but they are also to be found here, though an unsocial kind of policy requires unceasing attention to the most austere rules of caution and prudence. The little that I have seen and observed of this people, induces me to think that (except the generality of those who compose the highest and lowest orders,) they possess many qualities which are praiseworthy; and that two or three long and wise regins would make them a very powerful, and an amiable nation. But as I have not had sufficient opportunities of mixing with, and personally knowing many of them, time and further information may either confirm or alter this opinion. The evident suspense and indecision of the court respecting us, has kept many at a distance, with whom I should otherwise have been on a very familiar footing, and some of them have been so candid as to tell me so. This is a kind of prudence which naturally grows out of a jealous and absolute government, under which the people have, for many generations, been habituated to that kind of dependence, which constrains every class to watch and respect the opinions and inclinations of their superiors in power.—The prosperous tide of our affairs, however, has for some time past run so strong, that I think many of our obstacles here must soon give way. Shyness will then cease, and I shall not afterwards find it difficult to be received into more of their houses, and that in the only manner I ever wish to be received into any—I mean, at the front door, by direct invitation from the master of them, and without the precursory good offices of upper servants and unimportant favorites, whom I never could submit to court. Until this period arrives, I shall continue to cultivate the few acquaintances I have, and without giving offence to any, endeavor to increase their number, whenever it may be done with propriety and to advantage; but I shall, as heretofore, avoid embarrassing and intruding upon those who, in the mean time, may think it necessary to be reserved. Self respect joins with prudence in pointing out this line of conduct; and as I have no enemies of my own making, I am persuaded that instead of losing, I shall eventually be a gainer, by adhering to it, especially as those who may have been led to ascribe this conduct to improper motives, will then immediately find themselves undeceived.

New York as it is in 1833, and Citizens' Advertising Directory, &c. &c. Edited by Edwin Williams. New York: *J. Disturnell.*—This is a capital little book—and the better for being little. It has a good map of the city—a copy of the amended charter—lists of all the institutions of Education, Commerce, Charity, &c. &c. It is what it purports to be, an epitome of the city as it now is.

Botany of the Northern and Middle States, &c. &c. By Lewis C. Beck, M. D. &c. &c. Albany: *Webster & Skinners.*—The object of this work, according to the statement in the preface, is "to furnish a description of the plants of which it treats, adapted to the present state of botanical science." The plants, therefore, are arranged according to the natural system—with a "synopsis of the genera according to the Linnæan System." A sketch of the rudiments of botany is given, so as to adapt the work to beginners, as well as to those who have made some progress in the study; and a glossary of the terms usually employed. All plants found north of Virginia are embraced in this manual.

Elements of Criticism, by Lord Kames. Edited by Abraham Mills, A. M. 1 vol. New York: *Conner & Cooke.*—This American edition of Kames's Elements of Criticism is printed from the last Edinburg edition, revised by the author himself. The part of Mr. Mills in the book is that of preparing and prefixing to each chapter an analysis of its contents—and the supplying from good standard translations English versions of the various poetical illustrations, from classical and foreign writers, with which the work abounds. In this matter Mr. Mills judges rightly—for as a school book these Elements necessarily fall most frequently into the hands of persons unacquainted with foreign tongues, and who yet would desire to understand what they see before them, although aware that as examples of any peculiar figure or style, they lose their value in a translation.

There should have been more care bestowed by the proof reader on the typographical accuracy of the quotations. There are very many errors in them. Otherwise the book is well printed.

Voyages round the World, with selected Sketches of Voyages to the South Seas, &c., &c.; by Edmund Fanning: Collins & Hannay.—The narrative of Captain Fanning is well compiled, and written in that simple, unpretending style which should alway mark the relation of events in which the narrator is the chief actor. The interest of the work commences with the appearance of the author upon the scene in the humble capacity of a cabin boy in a coasting vessel; and—apart from a variety of general entertaining and instructive matter spread through the volume—it is for those who love to contemplate a manly and independent character, gradually rising in the world to competence, influence and usefulness, amply sustained by those particulars which refer solely to the author himself. The voyages described commence in the year 1792, and are brought down to 1832; and with much general information relating to the North and South Pacific, the China Seas, and late discoveries in various parts of the world, include a particular report of the commander of the first exploring expedition ever patronized by government, performed in the brigs Seraph and Annawan to the southern hemisphere. This report speaks in the highest terms of the Aurocanian Indians, a tribe previously but little known—for the Spaniards never could subdue them—and whom it describes as

"a noble and warlike nation," habituated to the use of arms, and bold and alert in defending their rights, but frank and friendly in their intercourse with the American strangers, so soon as they understood that their intentions were not hostile. An account of this interesting people is now in preparation for the press, by one of the gentlemen engaged in the expedition. This work is printed in a style highly creditable to the publishers. *

ASTRONOMY AND GENERAL PHYSICS, CONSIDERED WITH REFERENCE TO NATURAL THEOLOGY: by the Rev. WM. WHEWELL. Philadelphia, Carey, Lea & Blanchard.—The series of treatises of which this is one, is published in accordance with a provision in the will of the late Earl of Bridgewater, by which a munificent sum was left to be paid out of his estate to certain competent persons who should produce approved treatises on the Power, Wisdom, and Goodness of GOD, as manifested in the creation; sustaining the same by all reasonable arguments, and bringing the discoveries, ancient and modern, in the arts, sciences, and literature, to the illustration of the subjects treated:—a bequest which, while it could have suggested itself to no common mind, transcends in philanthropic foresight and enlightened benevolence towards the human family, all the endowments of churches and hospitals, and similar praiseworthy charities, that ever ennobled the last moments of those who have bequeathed their millions to the public. Infidelity in those of cold and sterile hearts, can only be met by the weapons they affect to wield alone themselves,—reason and knowledge. And, though fervent piety often exists in the true but humble mind, independent of such support, it should be ever backed by their influence in those of more fortunate opportunities. The severest study of the scholar may not lead him nearer to Heaven than the untutored reflection of the ploughman; but it arms him with weapons to make good his passage when once upon the true path, and it enables him to make the practice of his faith respected in himself, by those who want the judgment, the courage, or the feeling, to embrace it for their own sake: Religion, though she sit brooding like the dove in the bosom which she makes her home, may defend herself with the talons of the eagle when hawks are abroad that would drive her from her peaceful nestling place. Infidelity and skepticism have ever made their greatest strides when assuming the robes of learning; and in our day especially, we are all familiar with the attempts made, under the garb of science, to promulgate the wildest systems, and thoroughly to disorganize society. It only remains, then, for those who have the best interests of mankind—the cause of Eternal Truth at heart,—to bring that worldly knowledge, which has been likened to the wisdom of the serpent, to bear upon doctrines that wind with a serpent's cunning into the bosoms of the ignorant and half-educated. The laws of nature were never violated in the age of miracles, when natural means could accomplish the end in view: nor, while men have the faculties which, properly exerted, could keep pace with, and crush, the most active efforts of their fellows to swell the stream of infidelity, will Heaven interpose to stay a torrent which men should have the power to withstand. Let but half the active talent and practical knowledge of men which infidelity enlists under her gloomy banners, be substituted for the feeble understanding and ill-regulated zeal which so many well-meaning teachers of religion bring to their labors; let reason be opposed to sophistry, and sound knowledge to false learning; let, in fine, works like that before us be widely disseminated, and the bold, active, and ingenious enemies of religion be met by those equally sagacious, alert, and resolute, and the most timid of the many who depend upon the few, need never fear the host that come with subtile step to "steal their faith away." *

PENCIL SKETCHES; or OUTLINES OF CHARACTER AND MANNERS; by Miss LESLIE. Philadelphia: *Carey, Lea & Blanchard.*—The ingenious authoress of this little collection has already attained quite an extensive celebrity from the favor with which most of these tales have been received in the periodicals where they originally appeared. And the happy faculty she has of catching a thousand little peculiarities of manner, and hitting off the broader features of character, certainly entitles Miss Leslie to very great praise as a new writer, and holds forth liberal promise for her future efforts. Her forte appears to be decidedly in a species of half caricature, by which the airs and absurdities of individuals or coteries are placed in the strongest colors; but as a painter of society generally, she wants as yet that just and delicate blending of light and shade which can alone stand the test of scrutiny and give truth to such views. Still, even in her partial views of character and manners, there are occasional touches which remind us of the happiest of her brother's pencil. As the work of a young and rising authoress, we may take another opportunity to refer to that before us. *

The following is a list of other works lying on our table, which we must endeavor to give some account of hereafter:—

LECTURES, EXPLANATORY AND PRACTICAL, ON THE EPISTLE OF ST. PAUL TO THE PHILIPPIANS; intended chiefly for the use of families; by MANTON EASTBURN, Rector of the Church of the Ascension, N. Y.; 1 vol.; New York, G. & C. & H. CARVILL.

THREE YEARS IN NORTH AMERICA: by JAS. STUART; 2 vols.; N. York, J. & J. HARPER.

DIARY OF A PHYSICIAN, 2d vol., including the latest stories published in Blackwood; N. York, J. & J. HARPER.

THE MOTHER'S MEDICAL GUIDE, &c. &c.; by *R. & H. O. Bradford;* with notes amendments by Jerome V. C. Smith, M. D.: Boston, ALLEN & TICKNOR.

SCHINDERHANNER, OR THE ROBBER OF THE RHINE; 2d vol. of the Library of Romance; by LEIGH RITCHIE; Philadelphia, CAREY, LEA & BLANCHARD.

ZOHRAL, OR THE HOSTAGE; by the AUTHOR OF HADJI BABA; vol. 2; N. York, J. & J. HARPER.

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The 26th number of the American Quarterly Review, as we learn from the National Gazette, —is in forwardness and will appear at the stated period. The titles of the several articles are—Froissart and his Times; 2. Army of the United States; 3. Morrell's Voyages; 4. Fortification and Sieges; 5. Dungilson's Physiology; 6. Life of Sir Humphry Davy; 7. Negro Slavery; 8. Stuart's North America; 9. Palgrave's British Commonwealth.

## FOREIGN INTELLIGENCE.

LATER FROM EUROPE.—The packet ship Sovereign, from London, furnishes dates from that city to the 12th ult. and from Paris to the 9th. The intelligence is of more than ordinary interest. The affairs of the East become more complicated. * * * * * The French circular, explaining the course of France in seeking to mediate between the Porte and its Egyptian adversary, explains the actual condition of things—while it looks manifestly to the not improbable chance that this Eastern quarrel may extend to the Western Powers of Europe.

Don Pedro's cause is again somewhat in the ascendant—a supply of men, money and provisions having reached him.

A popular tumult and insurrection had occurred at Frankfort, caused by the systematic efforts which the German Diet is making, to extinguish, in all the States represented in or controlled by it, all free discussion, and every trace of liberal political institutions. No immediate consequence is to be looked for from the occurrence; nevertheless it is to be regarded as another indication—if oppressors could ever be forewarned—that the German population are ready at any moment to throw off the yoke that degrades them.

King William of Holland continues to play off the mighty nations which please themselves with the idea of regulating his affairs—while he gains time, and of course all the chances which time brings with it.

The bill for the coercion of Ireland is, it will be seen by Lord Anglesea's proclamation, already in force in one district in Ireland. The agitator O'Connell promises, while that bill remains in force, a weekly address through the papers to the people of Ireland.

A debate, angry and unbecoming, occurred in the Chamber of Deputies of Paris on the 8th April, in regard to the Editor of the *Tribune*—accused of breach of privilege for publishing that a member of the Chamber of Deputies received a monthly stipend from the French government. On the first day, M. de la Fayette moved the order of the day; upon this question the Chamber divided, when there appeared —for it 168; against it 179—Majority 11. The next day an order of the day motivé was moved. This motion, however, was negatived, 206 to 156, and the subject remained for further discussion.

Some recent elections in England, for vacancies in the House of Commons, appear to have resulted unfavorably to Ministers—whose stability, or at any rate popularity, seems to be somewhat shaken.

*First Proclamation of the Irish Government under the New Bill.*—DUBLIN, SUNDAY, APRIL 7.—The following proclamation extending the provisions of the Bill to the county and city of Kilkenny, appeared in the Dublin Gazette. It is stated that a proclamation will appear early in the present week, prohibiting the meetings of the Volunteers, the Conservatives, and the Trades' Union:—

*By the Lord Lieutenant and Council of Ireland, a Proclamation.*

ANGLESEY.—Whereas by an Act passed in the third year of his present Majesty's reign, intituled 'An Act for the more effectual Suppression of local Disturbances and dangerous Associations in Ireland,' it is amongst other things enacted that it shall and may be lawful for the Lord Lieutenant and other Chief Governor or Governors of Ireland, with the advice of His Majesty's Privy Council in Ireland, at any time after the passing of the said Act, and from time to time during the continuance thereof, as occasion may require, to issue his or their proclamation, declaring any county, county of a city, or county of a town in Ireland, or any portion thereof, respectively, to be in such a state of disturbance and insubordination as to require the application of the provisions of the said Act.

Now we, the Lord Lieutenant, do, by this our Proclamation, in pursuance and execution of the said Act, and by and with the advice of His Majesty's Privy Council in Ireland, declare the County of Kilkenny, the county of the city of Kilkenny, the city of Kilkenny, and the liberties of the said city, to be in such a state of disturbance and insubordination as to require the application of the provisions of the said Act.

And we do, by this our Proclamation, warn the inhabitants of the said county of Kilkenny, the city of the county of Kilkenny, the city of Kilkenny, and the liberties of the said city, to abstain from all seditious and other unlawful assemblages, processions, confederacies, meetings, and associations, and to be and remain in their respective habitations at all hours between sunset and sunrise, from and after Wednesday the tenth day of April instant, of which all Justices of the Peace of the said county, and county of a city, constables, peace officers, and others whom it may concern, are to take notice.

Given at the Council Chamber in Dublin, this 6th day of April, 1833.

ROSSE, WM. M'MAHON, WM. SAURIN,
JOHN RADCLIFFE, JOHN DOHERTY,
F. BLACKBURNE, R. H. VIVIAN.

"God save the King."

PARIS, APRIL 9.—Our accounts from Constantinople continue to be vague and unsatisfactory, and beyond the confirmation of Ibrahim's disavowal of the occupation of Smyrna, there is no new fact in the news received to throw a light upon the probable issue of

the contest in the East. Although it is said here that the government has received news of a favorable nature, the great features of the question remain unchanged in all the intelligence which has reached us through various channels.

Forty-four officers, from the half pay list, are to be immediately commissioned to act as members of the Courts Martial, to be held under the Coercion Bill. They are not to belong to any regiment doing duty in Ireland.—[Dublin Times.]

## SUMMARY.

*Custom House in Albany.*—A branch of the New-York Custom House is soon to be established in Albany William Seymour, Esq. has received the appointment of Collector.

Temperance in Albany.—The Temperance Recorder says:

By a unanimous vote of the corporation of the city of Albany, on the evening of the 26th of April, it was determined that no license should be granted for retailing ardent spirits, to be drank in stores or groceries the coming year.

*Bunker Hill Monument.*—We learn that a gentleman of this city has proposed to the Government of the Mechanic Association, to give $5000 towards completing the Bunker Hill Monument, provided hat $50,000 shall be raised within three months, to finish the Monument agreeably to the original design. The offer has been accepted by the Association, and the members have undertaken to raise the requisite sum by subscription. It is stated that to this $5000, $10,000 have been added, and that the whole $50,000 will in all probability be raised within the given time.—[Boston Centinel.]

*Aurora Borealis.*—One of those wonderful exhibitions of nature in which the heavens are decked in robes of splendor, and which men behold with awe and admiration, was visible for some time about nine o'clock last evening. Unlike that luminous and majestic arch which was seen to span the sky on a similar occasion a few years since, the light in this instance flashed along the northern and western horizon in brilliant and successive undulations. It seemed as though the banners of the upper sanctuary, in folds of living silver light, were let down, and waving and trembling in the breeze. (!)—[Troy Press.]

*Aurora Borealis.*—Yesterday evening the beautiful phenomenon of the Aurora was seen, at this city, shooting in beautiful corruscations, and enlightening the northern part of the heavens, while the southern was enveloped in darkness. The rays ascended to an altitude of forty five degrees, and, after playing for the space of about ten minutes, merged into a steady light, resembling that which immediately precedes the rising of the sun, and continued to shine in the north for some time afterwards.—[Wash. Tel.]

The Philadelphia United States Gazette remarks, that a brilliant aurora was visible there, too, on Friday evening. We have not heard that it was seen in this city.

[*From the National Intelligencer.*]

Georgia Convention.—On Thursday the 9th inst. the Convention resolved itself into a committee of the whole, and the report of the committee of 27 was taken into consideration. Thursday, Friday, and Saturday, were consumed in speeches, and in the discussion of various propositions for the organization of the Senate and House of Representatives of the General Assembly. Judging from what had taken place, it seems to be the opinion that the Senate will be considerably reduced, if not the House. But the great point of contention is the basis of representation. Sectional feelings and interests had prevailed, so far, in the debate. A large number of the Delegates, especially those of the northwestern counties, advocate the white population alone as the basis of representation, while the middle counties contend for the present basis of representation, which is the Federal, as established in the Constitution of Georgia, and in that of the United States. The Delegates of the lower counties contend for territorial representation, and appear willing to unite with those who will offer them advantages in the General Assembly which, on account of the sparseness of the population of those counties, they cannot possess, unless territory is represented in one or the other branch of the Legislature. On Saturday the main question at issue was tested, in committee of the whole, and decided *in favor of white population as a basis for representation*, but it was thought, when the subject would come before the committee, the Federal representation might be retained by a spirit of compromise between the various interests and views of the several sections of the country.

The Flood.—The Albany papers of Tuesday give further disasters by the late flood.

The docks and piers at Albany were above water, and business in a measure resumed. No particular account had been received as to the extent of damage to the canal, but it was believed that in a week it would be navigable. At Pulaski, considerable damage had been done. Lands had been overflown, bridges had been carried away, &c. At Canajoharie, H. St. John had part of his distillery carried off, and much other property was destroyed. And we find that Lyons, New Berlin, &c. had suffered from the sad effects of the flood.

[*From the Mohawk Gazette of Wednesday.*]

Freshet.—The streams in this vicinity have been raised to an unusual height by the late rains. We understand that the creek which runs near Fort Johnson, has been swollen to such a height that it has carried away nearly every bridge and mill-dam on it. Among the dams swept away we understand is the one at Fort Johnson.

The Auries creek, we also learn, has been so high that it has carried away thirty feet of the canal dam, near the village of Auriesville, and has occasioned a breach in the canal that it will probably take some days to repair.

The floods occasioned by the recent rains are not confined to the Hudson and its tributaries. The Connecticut, we hear, had swollen greatly above high water mark, and, by the extract below, from a Harrisburg paper, it appears that the Susquehanna, too, was rolling down angry torrents.

[*From the Harrisburg, (Pa.) Intelligencer, Tuesday.*]

The Flood.—After some weeks of warm dry weather, in which the Susquehanna became so low opposite this place, that droves of cattle forded the river, we have had a series of successive showers which have continued for nearly a week; and the change in vegetation is almost unparalelled.

When our paper went to press the Susquehanna had reached the heighth of 16 feet above low water mark, and was still rising. The oldest inhabitants say that the rise is greater than has taken place for thirty years—higher than the great flood 16 years ago. The rain must have been much more powerful up the river than in this vicinity. There must be a great destruction of property—the river is full of floating timber—sometimes whole rafts pass swiftly by.

B. B. Thatcher, Esq. the author of "Lives of the Indians," and favorably known as a gentleman of high literary attainments, has assumed the editorship of the Boston Mercantile Advertiser.

[*From the Albany Evening Journal, May* 18.]

The proprietors of the Evening Journal are called upon to discharge a painful duty, in recording the death of their estimable partner and friend, Mr. Benjamin D. Packard, who, after a protracted illness, expired at 9 o'clock this morning, in the 54th year of his age.

Mr. Packard was one of the oldest and most respectable citizens of Albany. He occupied the building in which this paper is published, as a Bookseller, for thirty years. His affection for his family, and his devotion to business, absorded and occupied his whole attention and time, After faithfully and honestly discharging all the duties which humanity imposed, he balanced and closed his worldly ledger, and has gone to render his last and final account.

*Ice.*—The Bostonians are about sending a cargo of ice to Calcutta, in the ship Tuscany. The Lowell Journal says "it is compactly stowed in the lower hold, surrounded with *tan*, which is well known to be a non-conductor of heat, and great care has been taken to exclude the external air. If this cargo should arrive there safe, it would doubtless command in that sultry climate an enormous price; but we may venture to say that the idea of transporting such a *perishable commodity*, so many thousands of miles, in the course of which the Equator must be twice traversed, would never enter into the head of any other being than a *Yankee*."

The venerable editor of the Raleigh Register, Joseph Gales, Sen. father of the editor of the National Intelligencer, has vacated his editorial chair, in favor of his son, W. R. Gales, and is about to remove to the city of Washington. A complimentary dinner was given to him prior to his departure, by the citizens of Raleigh, at which the Governor of the State presided, and Chief Justice Marshall was among the invited guests.—[Baltimore Chronicle.]

Comfortable Indifferences.—The New Orleans Courier of the 1st instant, says:

Seven or eight northern mails arrived to-day; by which we got a lot of old papers from the cities whence new were expected. The post office officers had not undertaken to open all the bags, as it is a most arduous task; so that we do not know whether the New York dates of the 12th, and Charleston of the 19th, which we lately received by way of Cincinnati, are more recent than those expected by this day's mail. Probably we shall be enabled to ascertain the fact to-morrow. It is, however, of little or no consequence.

*Life Assurances.*—For the information of those who may wish to provide for their families at a very small rate, and who have not the means of rendering them any adequate assistance at their death, by will or inheritance, the following case (which occurred in this city within a few months past, and which is but partially known) is now made public.

A merchant well advanced in life, and who for more than forty years had been successful in business, became unfortunate. His family was large, and so far as *his* means extended, must necessarily have been left destitute in the event of his speedy dissolution, which, however, was not, at that time, even probable. He, notwithstanding, it seems, was fully sensible of the uncertain tenure of *Life*, and caused his to be insured in the latter part of November, at the Baltimore Life Insuance Company, in the sum of $10,000. He died in the middle of February ensuing, within eleven weeks from the date of the policy, and his widow has received the whole sum without any trouble or expense, and before the period provided for the payment thereof had expired. This provident act has rendered his family not only comfortable, but, with prudence, independent; and they have abundant cause to bless the day when a resolution so happy in its consequences was formed and acted on.—[National Intelligencer.]

*Manufacture and Consumption of Ardent Spirits.*—The quantity of gallons of proof spirits distilled in England, in 1832, is stated to be 3,788,068; in Scotland, 7,979,038; and in Ireland, 9,260,920; making a total of 21,028,026 gallons. The quantity upon which the duties were paid for home consumption were, for England, 7,259,287 gallons; for Scotland, 4,861,515 gallons; for Ireland, 8,657,756 gallons.

*The Sulky and the Sociable.*—A gentleman and his wife were reduced from a life of splendor and luxury, by unavoidable misfortunes, to a more moderate way of living. He had been since their misfortunes extremely morose and gloomy, and it was a lively reply of his affectionate wife, that caused a change. "Wife," said he one morning, "my affairs are embarrassed, and it is necessary I should curtail my expenses. I should like to have your opinion as to the reduction." He spoke this in a more gentle tone than usual. 'My dear husband,' said she, 'I shall be perfectly happy if you will get rid of the *sulky*, and let us retain the *sociable*.'

We learn that the cargo of the brig Orb, lost on the Triangles, (Gulf of Mexico) on the 14th April, was worth about *fifty thousand dollars*. It was insured in this city. Vessel insured in Baltimore.—[Journal of Commerce]

*Old Berks Forever.*—The wife of Mr. Peter D. Miller, in Upper Bern township, Berks county, was safely delivered of *three sons at one birth*, who, with the mother, are all doing well.

Mr. Audubon, says the Boston Patriot, in a letter addressed to a gentleman in this city, dated Eastport, May 9th, observes, that he has concluded to charter a schooner of some 50 or 60 tons, for his voyage, in the following direction:—From Eastport to Sable Island, thence to Newfoundland, and all around it—thence to the coast of Labrador, and up towards Hudson's Bay, as far as the season will admit."

On Monday last, while several persons were at work in the marble quarry of John Broke, near Norristown, Pa. one of the banks fell in, and instantly killed one of the workmen—another died a short time after he was taken out, and a third and fourth were seriously injured. On the same day, in Plymouth township, in making a blast in a lime stone quarry, a stone weighing about 240 pounds, fell upon the roof of a neighboring house, and passed down the whole building to the lower floor, where the family were eating breakfast. No person was injured.

Mr. *Secretary Woodbury* arrived in Pensacola on 27th April, and remained there till the 30th, examining the Navy Yard, the Live Oak plantations, the fortifications, and, (as he states in a letter to the citizens declining a public dinner,) "the various improvements, contemplated in connection with Pensacola, as a healthy and important Naval Station for our West India Squadron, and for the whole Gulph of Mexico, as well as for the special protection of the growing commerce of Mobile Bay and the vast trade of the Mississippi River."

PENSACOLA, MAY 2d.—The U. S. Schooner SHARK, *Lieut. Comd'ng Boerum* arrived in our harbour on the 29th ult. The Shark has been absent from this place near five months, and has cruised around the Gulf of Mexico, the North side of Cuba around the windward Islands and along the whole coasts of Venezuella, New-Grenada and Central America. She is last from Porto Bello in ten days. Her Officers and Crew are all well,

[*From the Baltimore American.*]

We learn that ——, Saunders, Esq. of Carolina, has been appointed Commissioner under the French Treaty of Indemnity, vice —— Williams resigned.

We also learn that Daniel Brent, Esq, Chief Clerk of the Department of State, has been appointed Cousul General of France, to reside at Paris.

Mr. Saunders is we presume the former member of Congress of that name from North Carolina.

Mr. Brent's appointment is to the place occupied by the late *J. Cox Barnet.*

APPROPRIATIONS.—The appropriations made at the last session of Congress, were briefly as follows :

| | |
|---|---|
| Civil list for 1833 | $2,897,487 90 |
| Military service do | 4,966,036 40 |
| Pensions do | 628,917 00 |
| Naval service do | 3,860,963 28 |
| Indian Department, treaties, annuities, &c | 2,206,696 76 |
| Improvements of harbors, rivers and roads, and surveys | 1,086,993 30 |
| Public buildings and grounds, penitentiary, &c | 89,869 00 |
| Miscellaneous | 733,880 00 |
| Private claims | 30,021 19 |
| Amount of definite appropriations made 2d session 22d Congress | $16,500,864 83 |

PATENTS.—The number of patents granted for 'useful inventions' in 1832, was 474, viz. to persons in

| | | | |
|---|---|---|---|
| Maine | 24 | Georgia | 4 |
| New Hampshire | 11 | Kentucky | 7 |
| Massachusetts | 56 | Tennessee | 7 |
| Rhode Island | 4 | Ohio | 54 |
| Connecticut | 29 | Louisiana | 1 |
| Vermont | 14 | Indiana | 4 |
| New York | 122 | Mississippi | 3 |
| New Jersey | 8 | Alabama | 2 |
| Pennsylvania | 82 | Missouri | 1 |
| Maryland | 12 | Michigan Territory | 2 |
| Virginia | 11 | District of Columbia | 7 |
| North Carolina | 5 | | |
| South Caiolina | 4 | Total | 474 |

The Mayor and Aldermen of Boston were arraigned at the bar of the Municipal Court, recently, upon an indictment found against them by the Grand Jury, for a false return of votes in April last. They severally pleaded not guilty. Their trial was assigned for Monday next, and they were discharged on their recognizance of $200 each.

*Discovery.*—Among the late new publications in Paris, we find one with the following title: "Grammaire Conjugale" (Conjugal Grammar) or general principles by the aid of which a wife may be broken in, and made to go with the regularity of a clock, and render her at the same time as mild as a lamb.

The journeymen carpenters have turned out, and demand $1 50 wages per day. The present pay is $1 37 1-2. They paraded the streets yesterday, to the number of between 3 and 400—very peaceably however.

*Steamboat Accidents.*—The Steam Boat Spy was snagged in descending the Arkansas, twenty-five miles below Fort Gibson, and the last accounts she lay with the water up to her guards. On the night of the 7th ult., the Steam Boats Wyoming and Arkansaw came in contact in the Arkansas, and the former was considerably damaged.—[Louisville Gazette.]

HEALTH OF NEW ORLEANS.—The New Orleans Courier of 30th ult. has this paragraph.

We are not alarmists, nor would we wantonly instil chimerical fears into the minds of our fellowcitizens. But we believe it to be sound policy, and conceive it our duty, to inform them of the actual situation of the health of the city. It would be ridiculous to deny, that for some days past, the number of deaths has been increasing, and that the greater part expired after a very few hours sickness; to speak plainly, they died of the merciless cholera; or, if we mistake the character of that dire disease, the prevailing one is, at least, as fatal in its effects; and although, hitherto, the number of victims may be deemed inconsiderable, we nevertheless are of opinion that our constituted authorities should inquire into the state of the public health, and adopt such measures as might tend to prevent further mischief.

[*From the Boston Transcript.*]

GO ALONE.—The following is the superscription of a letter which passed through our Post office, yesterday, on its way to Canada, and will no doubt be duly received, provided John gives the credit asked for :

Eighteen and three-fourths cents I've paid
To Uncle Sam, to be conveyed
To Derby Line, without delay,
Betwixt Vermont and Canada;
From Derby Line, if John Bull will
Carry me safely to Georgeville,
Four and a half pence will I engage
He shall receive from Gorham Page;
And if said Page will not comply,
I'll stay in Georgeville until I die.

## MISCELLANY.

[*From the Western Monthly Magazine for May.*]

A SCENE IN 'THE DARK AND BLOODY GROUND.'

JAMES MORGAN, a native of Maryland, married at an early age, and soon after settled himself near Bryant's station, in the wilds of Kentucky. Like most pioneers of the west, he had cut down the cane, built a cabin, deadened the timber, enclosed a field with a worm-fence, and planted some corn.

It was on the 15th day of August, 1782; the sun had descended, a pleasant breeze was playing through the surrounding wood, the tall cane bowed under its gentle influence, and the broad green leaves of the corn proudly waved in the air; Morgan had seated himself in the door of the cabin, with his infant on his knee; his young and happy wife had laid aside her spinning-wheel, and was busily engaged in preparing the frugal meal. That afternoon, Morgan had accidentally found a bundle of letters, which he had finished reading to his wife, before he took his seat at the door. It was a correspondence in which they had acknowledged an early and ardent attachment for each other, and the perusal left evident traces of joy on the countenance of both; the little infant, too, seemed to partake of its parents' feelings, by its cherub smiles, its playful humor, and its infantile caresses. While thus agreeably employed, the report of a rifle was heard; another, and another, followed in quick succession. Morgan sprang to his feet, his wife ran to the door, as they simultaneously exclaimed, 'Indians!' The door was immediately barred, and the next moment all their fears were realized, by a bold and spirited attack from a small party of Indians. The cabin could not be *successfully* defended, and time was precious. Morgan, cool, brave, and prompt, soon decided. A puncheon was raised; while Morgan was in the act of concealing his wife under the floor, a mother's feelings overcame her, she arose, seized her infant, but was told that its cries would betray her place of concealment. She hesitated, gazed silently upon it. A momentary struggle between affection and duty took place. She once more pressed her child to her agitated bosom, again, and again, and kissed it with impassioned tenderness. The infant, alarmed at the profusion of tears that fell upon its cheek, looked up in its mother's face, threw its little arms around her neck, and wept aloud. 'In the name of Heaven, Eliza, release the child, or we shall all be lost,' said the distracted husband, in a soft imploring tone of voice, as he forced the infant from the arms of his wife, hastily replaced the puncheon, took up his gun, knife and hatchet, ran up the ladder that led to the garret, and drew it after him. In a moment the door was burst open, and the savages entered. By this time Morgan had secured his child in a bag, and lashed it to his back, then throwing off some clapboards from the roof of the cabin, resolutely leaped to the ground. He was instantly assailed by two Indians. As the first approached, he knocked him down with the butt of his gun. The other advanced with uplifted tomahawk; Morgan let fall his gun, and *closed in.* The savage made a blow, missed his aim, but severed the cord that bound the infant to his back, and it fell. The contest over the child now became warm and fierce, and was carried on with knives only. The combatants thrust and plunged their deadly instruments into each other, with desperate fury. The robust and athletic Morgan at length got the ascendancy. Both were badly cut, and bled freely, but the stabs of the white man were better aimed and deeper. The Indian now became frantic with rage and disappointment. His teeth were clenched together, the veins in his neck swollen, his eyes seemed to emit sparks of fire, as he grasped Morgan by the hair, elevated himself on tip-toe, and raised his bloody knife. It descended with a desperate intent, but Morgan, watchful as he was brave, took advantage of the moment, made a quick and violent thrust at the side of the Indian—the blood gushed out, the savage gave a feeble groan, and sunk to the earth. Morgan hastily took up his child and gun, and hurried off. The Indians in the house, busily engaged in drinking and plundering, were not apprized of the contest in the yard, until the one that had been knocked down gave signs of returning life, and called them to the scene of action. Morgan was discovered, immediately pursued, and a dog put on his trail. Operated upon by all the feelings of a husband and a father, he moved onward with the speed of a hunted stag, and soon outstripped the Indians, but the dog kept in close pursuit.—Finding it impossible either to outrun or elude the cunning animal, trained to hunts of this kind, he halted, waited until it came within a few yards of him, fired and brought it down, reloaded his gun, and again pushed forward. Bryant's station was not far off—firing was heard—he stopped for a moment, and again advanced. Fires could now be distinctly seen, extending for some distance on both sides of Elkhorn creek. The station was in view; lighted arrows fast descending on the roof of the cabins; it was no longer doubtful; Bryant's station was besieged by a large force, and could not be entered at that time. He paused—the cries of his infant, that he had again lashed to his back, aroused him to a sense of his own danger, and his wife's perilous situation. Another effort was made, and he in a short time, reached the house of a brother, who resided between the station and Lexington, where he left the child, and the two brothers immediately set out for his dwelling. As they approached the clearing, a light broke upon his view—his speed quickened, his fears increased, and the most agonizing apprehensions crowded upon his mind. He emerged from the cane-brake, beheld his house in flames, and almost burned to the ground. 'My wife!' he exclaimed, as he pressed one hand to his forehead, and grasped the fence with the other, to support his tottering frame. He gazed for sometime on the ruin and desolation before him, advanced a few steps, and sunk exhausted to the earth. Morning came; the bright luminary of heaven arose, and still found him seated near the almost expiring embers. In his right hand, he held a small stick, with which he was tracing the name of Eliza on the ground—his left was thrown over his favorite dog, that lay by his side, looking first on the ruin, and then on his master, with evident signs of grief. Morgan arose; the two brothers now made a search, and found some bones, almost burned to ashes, which they carefully gathered and silently consigned to their mother earth, beneath the wide spread branches of a venerable oak consecrated by the purest and holiest recollections. One of the most interesting pages in the annals of Tacitus is that in which he so eloquently and so feelingly describes the return of Agrippina, to her country and her home, bearing the urn that contained the ashes of her murdered husband, surrounded by her weeping children and mourning friends. There is an awakening interest in the deep-rooted sorrow, that calls into action all the kind feelings and tender sympathies of our nature; and the heart can, no doubt, be as warmly operated upon in the wild plains of America as on the classic grounds of Italy. There is something peculiarly touching in the performance of the last sad duty of burial, whether encompassed by the proud and lofty towers of Imperial Rome, while the cries of mourning thousands ascend to heaven, or surrounded by the tall green trees of republican Kentucky, where the stricken heart silently pours forth its sorrows.

On the evening of the 16th of August, Morgan, his brother, and a number of men from Lexington, gallantly threw themselves into the besieged station, and saved the fortress. After a bold, spirited, and unsuccessful siege, Simon Girty drew off his men on the morning of the third day, and marched in the direction of the Lower Blue Licks. By this time, the whole neighborhood had risen in arms, and with the aid promptly given by Harrodsburg and Boon's station, one hundred and sixty six mounted men mustered under the command of Colonels Todd and Trigg. The line of march was immediately taken up, and the pursuit commenced. After marching a short distance, colonel Daniel Boon, and some others, watchful and experienced, and well acquainted with Indian *signs*, discovered strong evidences

of tardiness and ostentation, that seemed to invite an attack. The trees were chopped for the purpose of pointing out the *route*, while they took pains to conceal the number, by marching in single file, stepping in each other's track, and contracting their camps. As the van arrived on the south bank of Licking river, at the Lower Blue Licks, a few scattering Indians were discovered, *slowly* and *carelessly* retiring over the hills on the north side of the river. A halt was immediately called, and a consultation took place. Neither of the commanding officers being much acquainted with Indian warfare, they asked the opinion and advice of the soldier and woodsman, colonel Boon, who was well acquainted with the situation of the ground. He, in his plain, frank, and impressive manner, stated, that in his opinion, the enemy invited an attack; their number might probably vary from three to five hundred, owing to the ambiguous nature of the sign; the main body was near, and prepared for action, and the ground was well calculated for *ambuscade*. The river wound in an irregular ellipsis, near the centre of which, and on the top of the hill then in view, passed the great Buffalo road, leading to Limestone; two ravines made up in different directions, about one mile in advance, and terminated near each other, on the right and left of the road; both ravines were covered with small oak and underwood, while the ground between the river and ravines was uneven and barren; the Indians would be able to fight under cover, while the Kentuckians could scarce be protected by a single shrub. It was, therefore, most advisable to wait for the reinforcement hourly looked for, under the command of colonel Logan, and in the meantime, the surrounding country could be examined, and the position of the enemy reconnoitered, but in the event of an immediate attack being resolved on, the troops ought to be divided; one division to march up on the south side of the river, cross the mouth of a small creek, and fall upon the outside of the ravines, while the other division should place itself in a position to take advantage of circumstances, co-operate with the first division in event of an attack, and make an effort to take the enemy in their *own snares*, should they be in *ambuscade*. Already had Boon gained over to his opinion a large portion of those who heard him, when the rash and impatient M'Gay applied the rowels to the sides of his horse, and plunged into the stream, crying out at the same time in a loud voice, "Those who are not cowards will follow me, and I will show them where the Indians are!" A confusion, so common and so fatal among undisciplined troops, now took place. One followed, another followed, some doubted, others wavered, a few were determined, and a part stood firm. But unfortunately, the prompt and authoritative word '*halt*,' was not given, and the council was broken up. Morgan, together with some others, who had listened to the advice of Boon, were convinced of its correctness, and opposed to crossing the river, but at length suffered themselves to be carried along in the crowd, until the whole force was on the northern bank. No order was observed, no command was given. The narrow strip of bottom-ground, in which the salt-spring is situated was soon passed, and the hill ascended. Here they were led, by the re-appearance of the few Indians first discovered, to a ridge on the left, which terminated near the two ravines, and at its termination, was covered with small oak. The distance from the spring to the ravines was about one mile, and the intervening ground uneven and barren; for ages back it had been stripped of its foliage by the tread of the innumerable herds of deer and buffalo that resorted to the Lick, and presented an almost unbroken pavement of rocks, through which a few scattering scrubby oaks had here and there forced their way. M'Gay and M'Bride, at the head of the party in front, that first reached the woods, were instantly attacked by the Indians that lay concealed, and waiting for them. The action now commenced, and soon became warm and bloody. A constant and destructive fire was kept up. The savage war-whoop, that burst from both ravines, filled the air with loud and increased peals of discordant yells. It was soon discovered that the two ravines, which concealed the enemy, extended beyond the whole line of the Kentuckians, and now poured forth a countless horde of hungry cannibals prepared for slaughter and thirsting for blood. Todd and Trigg rushed forward, and fearlessly fronted the enemy; they fought, they bled, and fell in the early part of the action, nobly evincing that they were as brave in the field of battle, as amiable in private life. The patriot Harland was also slain, bravely defending himself, and proudly sustaining his country's honor. The gallant and youthful Boon fell by the side of his heroic father, who hewed his way through the enemy, and laid every opposing warrior low. All that could be accomplished by patriotism, effected by bravery, won by a disregard of death, or gained by a love of country, was now performed. Arm to arm, breast to breast, they had struggled with the enemy, but all in vain. A force of three to five, and that in ambuscade, was overwhelming and irresistible. Pressed in the front and assaulted on the right, attacked on the left, and about being surrounded, many of the best and ablest slain, and others fast falling in every direction, a retreat was attempted under the edge of the tomahawk. When the firing commenced, the greater portion of the troops had dismounted; some regained their horses, others retreated on foot. The victorious enemy pursued with deadly and victorious perseverance. The retreating Kentuckians hurried over the rocks, rushed down, and the victors and the vanquished plunged together in the stream; some were slain before they reached the bank, but the river presented a scene bloody as it was destructive. The day was warm, the retreat rapid; the unarmed and exhausted Kentuckians fell easy victims to the tomahawk and scalping knife, and in a short time Licking ran streams of blood. The few who had gained the southern shore on horseback, halted and fired: this caused a momentary check, but after a short pause, the pursuit was again renewed, and safety only found in Bryant's station, thirty-six miles from the field of battle. Here the defeated Kentuckians met the van of Col. Logan's command, about four hundred strong. The Colonel halted until the rear came up, and the next day marched in pursuit of the enemy. The battle ground was reached the second day after the action, and presented a scene that agonized every bosom, pained every heart, and moistened every eye. The dead bodies, exposed to the rays of a scorching sun, were so much swollen and mangled, that the father, brother and friend, who had come to perform the last sad rites of burial, were denied even the melancholy satisfaction of knowing whether those for whom they sought were killed or taken prisoners. The aged parent, in hope of recognizing a favorite son, turned, anxiously turned, body after body, but all in vain; the tear rolled down the furrowed cheek, yet it fell upon he knew not whom.

James Morgan was among the last that had crossed the river, and was in the rear until the hill was ascended. As soon as he beheld the Indians reappear on the ridge, he felt anew his wrongs, and recollected the lovely object of his early affections. He urged on his horse, and pressed to the front. While in the act of leaping from his saddle, he received a rifle ball in his thigh, and he fell: an Indian sprang upon him, seized him by the hair, and applied the scalping-knife. At this moment, Morgan cast up his eyes, and recognized the handkerchief that bound the head of the savage, and which he knew to be his wife's. This added renewed strength to his body, and increased activity to his fury. He quickly threw his left arm around the Indian, and with a death-like grasp, hugged him to his bosom, plunged his knife into his side, and he expired in his arms. Releasing himself from the savage, Morgan crawled under a small oak, on an elevated piece of ground, a short distance from him. The scene of action shifted, and he remained undiscovered and unscalped, an anxious spectator of the battle. It was now midnight. Girty and his savage band, after taking all the scalps they could find, left the battle ground. Morgan was seated at the foot of the oak, its trunk supporting his head. The rugged and uneven ground that surrounded him was covered with the slain; the once white projecting rocks, bleached with the rain and sun of centuries, were crimsoned with the blood that had warmed the heart and animated the bosom of the patriot and the soldier. But a few hours before, he had seen the gallant Todd, Trigg, Harland, Boon, and many others, in all the pride of life, flushing with hope, glowing with zeal, and burning with patriotism—now lifeless, as the rocks that lay scattered over '*the dark and bloody ground*;' friends and enemies, the red and the white man, side by side, quietly slumbering in eternal repose. The pale glimmering of the moon occasionally threw a faint ray of light upon the mangled bodies of the dead, then a passing cloud enveloped all in darkness, and gave additional horror to the feeble cries of a few, still lingering in the last agonies of protracted death, rendered doubly appalling by the coarse growl of the bear, the loud howl of the wolf, the shrill and varied notes of the wild-cat and panther, feeding on the dead and dying. Morgan beheld the scene with heart-rending sensations, and looked forward with the apathy of despair, to his own end. A large and ferocious looking bear, covered with blood, now approached him; he threw himself upon the ground, silently commended his soul to Heaven, and in breathless anxiety awaited his fate. The satiated animal slowly passed on without noticing him. Morgan raised his head, was about offering thanks for his unexpected preservation, when the cry of a pack of wolves opened upon him, and again awakened him to a sense of his danger. He placed his hands over his eyes, fell on his face, and in silent agony again awaited his fate. He heard a rustling in the bushes—steps approached—a cold chill ran over him. Imagination, creative, busy imagination, was actively employed—death, horrible death, awaited him; his limbs would, in all probability, be torn from his body, and he devoured alive. He felt a touch—the vital spark was almost extinguished—another touch more violent than the first, and he was turned over—the cold sweat ran down in torrents—his hands were violently forced from his face—the moon passed from under a cloud, a faint ray beamed upon him—his eyes involuntarily opened, and he beheld his wife, who, in a scarce audible voice, exclaimed, 'my husband!' and fell upon his bosom.

Morgan now learned from his wife that, after the Indians had entered the house, they found some spirits, and drank freely; an altercation soon took place, one of them received a mortal stab and fell; his blood ran through the floor on her; believing it to be the blood of her husband, she shrieked aloud, and betrayed her place of concealment. She was immediately taken and bound. The party, after setting fire to the house, proceeded to Bryant's station. On the day of the battle of the Blue Licks, a horse with saddle and bridle rushed by her, which she knew to be her husband's. During the action the prisoners were left unguarded, made their escape, and lay concealed beneath some bushes under the bank of the river. After the Indians had returned from the pursuit, and left the battle-ground, she, with some other persons that had escaped with her, determined to made a search for their friends, and if on the field and living, save them if possible from the beasts of prey. After searching for some time, and almost despairing of success, she fortunately discovered him. The party of Col. Logan found Morgan and his wife, and restored them to their friends, their infant, and their home.

*Mason County, Kentucky.*

## POETRY.

[The following pathetic piece is copied here from the Alexandria Gazette, with the omission of a single verse, the indifferent construction of which mars the simple beauty of the others:]

"ARE WE ALMOST THERE?"

"Are we almost there—are we almost there?"
Said a dying girl, as she drew near home—
"Are those our poplar trees which rear
Their forms so high 'gainst the heavens' blue dome?"

Then she talked of her flowers, and thought of the well,
Where the cool water splash'd o'er the large white stone,
And she thought it would soothe like a fairy spell.
Could she drink from that fount when the fever was on.

While yet so young, and her bloom grew less,
They had borne her away to a kindlier clime—
For she would not tell that 'twas only distress
Which had gathered life's rose in its sweet spring-time.

And she had looked, when they bade her to look,
At many a ruin and many a shrine—
At the sculptured niche, and the pictured nook,
And marked from high places the sun's decline.

But in secret she sighed for a quiet spot,
Where she oft had played in childhood's hour;
Tho' shrub or flowret marked it not,
'Twas dearer to her than the gayest bower.

And oft did she ask, "Are we almost there?"
But her voice grew faint, and her flush'd cheek pale:
And they strove to soothe her, with useless care,
As her sighs would escape on the evening gale.

Then swiftly more swiftly, they hurried her on:
But anxious hearts felt a chill despair;
For when the light of that eye was gone,
And the quick pulse stopp'd, she was almost there!

IMOGENE.

PATERNAL AFFECTION—*By Barry Cornwall.*

The feelings of a parent, regarding a child in dangerous sickness, are beautifully expressed in the following stanzas:—

Send down thy winged Angel, God!
Amidst this night so wild,
And bid him come where now we watch,
And breathe upon our child.

She lies upon her pillow, pale,
And moans within her sleep,
Or waketh with a patient smile,
And striveth not to weep.

How gentle and how good a child
She is we know too well,
And dearer to her parents' hearts
Than our weak words can tell.

We love—we watch throughout the night,
To aid, when need may be,
We hope—and have despaired at times,
But now we turn to Thee!

## METEOROLOGICAL RECORD, KEPT IN THE CITY OF NEW-YORK,

*For the Week ending Monday, May 20, 1833, inclusive.*

[Communicated for the American Railroad Journal and Advocate of Internal Improvements.]

| Date. | Hour. | Thermometer. | Barometer. | Winds. | Strength of Wind. | Clouds from what direction. | Weather and Remarks. |
|---|---|---|---|---|---|---|---|
| Tuesdy. May 14 | 6 a. m. | 63 | 30·08 | SE | light | S | rainy |
| | 10 | 68 | 30·11 | S by E | .. | .. | cloudy |
| | 2 p. m. | 73 | 30·07 | S | .. | .. | .. |
| | 6 | 65 | 30·03 | SSE | .. | SE | fair |
| | 10 | 63 | 30·04 | .. | .. | .. | .. |
| Wednesd. " 15 | 6 a. m. | 65 | 30·00 | .. | .. | .. | rainy |
| | 10 | 68 | 30·03 | N | .. | .. | .. |
| | 2 p. m. | 72 | 30·07 | NNE | .. | SW / NNE | cloudy |
| | 6 | 68 | 30·10 | ENE | .. | N | rainy |
| | 10 | 66 | 30·12 | .. | .. | .. | cloudy |
| Thursday, " 16 | 6 a. m. | 59 | 30·18 | NE | fresh | .. | .. |
| | 10 | 59 | 30·16 | .. | .. | .. | .. |
| | 2 p. m. | 58 | 30·15 | .. | strong | NNW | rainy |
| | 6 | 52 | 30·15 | .. | .. | .. | .. |
| | 10 | 53 | 30·11 | .. | .. | .. | rain |
| Friday, " 17 | 6 a. m. | 55 | 30·06 | .. | light | .. | .. |
| | 10 | 61 | 30·05 | .. | .. | .. | cloudy |
| | 2 p. m. | 67 | 30·04 | SSW | .. | SW | fair |
| | 6 | 64 | 30·01 | .. | .. | .. | .. |
| | 10 | 61 | 30·00 | .. | .. | .. | cloudy |
| Saturday, " 18 | 6 a. m. | 60 | 30.00 | .. | .. | WSW | .. |
| | 10 | 66 | 29·98 | .. | moderate | .. | .. |
| | 2 p. m. | 76 | 29·88 | .. | .. | W—NW | fair |
| | 6 | 72 | 29·85 | .. | .. | NW | .. |
| | 10 | 72 | 29·86 | .. | .. | .. | .. |
| Sunday, " 19 | 6 a. m. | 70 | 29·85 | SW | light | WSW | .. |
| | 10 | 76 | 29·87 | SW by W | moderate | .. | .. —horizon mostly |
| | 2 p. m. | 82 | 29·86 | WSW | .. | .. | .. — .. [cloudy |
| | 6 | 76 | 29·88 | .. | .. | WSW / NW | .. — .. |
| | 10 | 72 | 29·90 | .. | .. | .. | .. — .. |
| Monday, " 20 | 6 a. m. | 68 | 29·93 | NE—ENE | .. | WSW | .. —cloudy |
| | 10 | 64 | 29·99 | ENE—E | .. | .. | cloudy |
| | 2 p. m. | 62 | 29·95 | E | .. | .. | .. —rain |
| | 6 | 60 | 29·95 | .. | .. | .. | rain |
| | 10 | 58 | 29·93 | .. | .. | .. | rainy |

Average temperature of the week, 65°.54.

N. B.—During the early part of the current week all our great rivers and their tributary streams have been greatly swollen by the heavy rains which succeded the late drought. The Connecticut rose 20 feet at Hartford, and the Ohio, the Susquehannah, the Hudson, and the Mohawk, as well as well as the rivers which discharge into Lake Ontario, have all risen to an extraordinary height, and much injury has been sustained. It is worthy of remark, that the barometer has stood much above its mean elevation during the period of these rains, and for a considerable time previous thereto, having ranged from 30 inches to 30, 23, except on the occurrence of the first showers, when it subsided only to 29, 89 and soon recovered its altitude. This fact shows conclusively that the production of rain has no *necessary* connection with the fall of the Mercury in the barometer.